

United States Environmental Protection Agency Region 1 – New England

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September 17, 2009

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Superfund Records Center SITE: Down 7.5

BREAK: 7.5

OTHER:

Subject: Southern Plume Interim Remedial Action Report

Dear Mr. Peschel;

Pursuant to Section XI, Paragraph 38 of the consent decree governing the cleanup at the Dover Municipal Landfill Superfund Site in Dover, New Hampshire, I am today approving the Interim Remedial Action Report (RA Report) for the Southern Plume Management of Migration Remedy. The RA Report was submitted pursuant to Section 7.3.7. of the 2009 Amended Statement of Work (ASOW) directing the cleanup of Southern Plume groundwater aquifer at the site. Please note that this approval also meets the intent of EPA's guidance (OSWER 9320.2-09-P) which defines this document as an "Interim Remedial Action Report" for the purpose of documenting ground water restoration remedies.

If you have any questions concerning this letter, please call Darryl Luce at 617-918-1336 or ManChak Ng at 617-918-1785.

Sincerely.

Larry Brill, Chief

Remediation and Restoration Branch I

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¹United States of America and State of New Hampshire v. City of Dover, et al., Civil Action 1:92-cv-406-M, May 15, 2008.



INTERIM REMEDIAL ACTION REPORT SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Prepared For:

Executive Committee of the Group of Work Settling Defendants Dover Municipal Landfill Superfund Site

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September 14, 2009

GeoInsight Project 2009-009

Project Files/2009/2009 Docs/SouthernPlume/Interim-RA Report-Final-9-14-09.doc



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ACRONYMS

ARAR Applicable or Relevant and Appropriate Requirements

AGQS Ambient Groundwater Quality Standard

AROD Amended Record of Decision

AS/SVE air-sparging/soil vacuum extraction

BGS below ground surface COC Constituents of concern DQO data quality objective

EMP environmental monitoring program
ESD Explanation of Significant Difference

FDR field data record FES Field Elements Study FFS focused feasibility study

Frac fractionation

FS FEASIBILITY STUDY

GMP Groundwater Management Permit GMZ Groundwater Management Zone

gpd gallons per day
gpm gallons per minute
GWE ground water extraction
ICL interim cleanup level
LUI Lower Upper Interbedded
MCLs Maximum Contaminant Le

MCLs Maximum Contaminant Levels
MCLG Maximum Contaminant Level Goal

MOM Management of Migration

NHDES New Hampshire Department of Environmental Services

NPL National Priority List O&M operation and monitoring

OSHA Occupation Safety and Health Administrator

PDI Pre-Design Investigation

POTW publicly owned treatment works
PPE personal protective equipment
QAPP Quality Assurance Project Plan

QA/QC quality assurance and quality control

RA Remedial Action

RAO Remedial Action Objective

RCRA Resource Conservation and Recovery Act

RFFS Revised Focused Feasibility Study

RD Remedial Design RI Remedial Investigation ROD Record of Decision



ACRONYMS (continued)

SC Source Control

SOP Standard Operating Procedure

SOW Statement of Work THF tetrahydrofuran US Upper Sand

USEPA United States Environmental Protection Agency

UUI Upper Upper-Interbedded VOC volatile organic compound

Title: Southern Plume Interim Remedial Action Report September 14, 2009



INTERIM REMEDIAL ACTION REPORT SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

1.0 INTRODUCTION

1.1 OVERVIEW

The United States Environmental Protection Agency (USEPA) requested that an Interim Remedial Action Report (Interim RA Report) be prepared for the Southern Plume Management of Migration (MOM) Remedial Action ground water extraction (GWE) system associated with the Dover Municipal Landfill (the Landfill) Superfund Site. This Interim RA Report was prepared by GeoInsight, Inc. (GeoInsight) at the request of the Executive Committee of the Group of Work Settling Defendants (referred to herein as the Dover Group). The Interim RA Report was prepared in general accordance with USEPA Guidance 540-R-98-016 (OSWER Directive 9320.2-09A-P; January 2000).

The Interim RA Report was prepared to document final installation and construction activities associated with Southern Plume MOM RA. This report includes general information regarding the history and regulatory status of the Dover Municipal Landfill Superfund Site, and how the Southern Plume MOM RA relates to other Landfill Source Control (SC) and MOM activities. This Interim RA Report summarizes activities that were completed from November 2007 to July 2009. A Final RA Report will be prepared in the future when remedial action objectives (RAOs) are met with regard to the Southern Plume.



1.2 LOCATION, SIZE, ENVIRONMENTAL SETTING

The Dover Municipal Landfill is located in the western corner of the City of Dover, New Hampshire. The Landfill is located on the south side of Tolend Road, west of the intersection with Glen Hill Road (see Figure 1). The Landfill area is bordered by rural, residential properties along Tolend and Glen Hill Roads to the north and northeast, and undeveloped, forested wetlands to the south, east, and west. The Cocheco River and Bellamy Reservoir are located approximately 600 feet northeast and 1,500 feet south of the Site, respectively (Figure 1).

The Landfill and surrounding features are shown on Figure 2. The main entrance is located at the northeast corner of the Landfill. Based upon evaluations completed during the 1995 pre-design investigation (PDI), the approximate footprint of the Landfill is 47 acres. The top of the Landfill surface is relatively flat and slopes slightly upward to the west toward the northwest corner of the Landfill, with a total elevation change over the 2,000-foot length of the Landfill of approximately 20 feet. Along the northeast border, the elevation of the Landfill surface is similar to that of Tolend Road (i.e., there is no defined side slope and toe to the Landfill). To the south and west, the Landfill border is defined by a side slope that reaches a maximum height (above the adjacent woodlands) of approximately 20 feet near the northwest corner of the Landfill.

The growth of vegetation on top of the Landfill and the growth of brush and trees along several of the perimeter Landfill locations, particularly along the northeast and north portions of the Landfill, reflect the greatest physical change to the Landfill since investigation activities were initiated in the 1980s. Poplar and birch trees are well-established in some portions of the Landfill. The majority of the central portion of the Landfill is covered by grasses and low brush.



1.3 OPERATIONS AND WASTE MANAGEMENT PRACTICES

The Landfill operated from approximately 1960 to 1979. The unlined Landfill accepted both domestic and industrial waste material from the surrounding community. Early operation practices reportedly included emptying drums of liquid waste into pits excavated to the water table and burning the waste prior to disposal (based upon a summary of Landfill operator depositions that were included in Appendix O of the 2004 Revised Focused Feasibility Study [RFFS]). Waste disposal initially occurred in the eastern portion of the Landfill and progressed westward until the current areal extent of the Landfill was reached (approximately 47 acres). The thickness of the waste material is variable and generally increases from the east to the west, with a maximum thickness of approximately 24 feet in the west-central portion of the Landfill (Figure 3-1 of the 1995 PDI report illustrates the limits and relative thicknesses of waste material within the Landfill). Initial Landfill closure activities were completed in 1980 and consisted of placing clean fill over the existing Landfill surface. In the early 1980s, additional closure activities were undertaken and included the excavation of a ditch along the perimeter of the north, west, and south borders of the Landfill to collect surface water runoff and intercept shallow ground water flow. This ditch has been referred to as the perimeter ditch. The ditch ultimately discharges to an erosional feature referred to as the "drainage swale" that is located to the east of the intersection of Tolend and Glen Hill Roads. The swale discharges to the Cocheco River. Features of the Landfill and surrounding area are shown on Figure 2.

1.4 REGULATORY AND ENFORCEMENT HISTORY

The Landfill was placed on the USEPA's National Priority List (NPL) on September 8, 1983. Constituents of concern (COCs) at the Landfill include volatile organic compounds (VOCs) and arsenic. A Remedial Investigation (RI) was completed by Goldberg-Zoino & Associates, Inc. (GZA) and Wehran Engineers and Scientists (Wehran) in 1988 based upon the analyses of the results of sampling activities and field investigations completed during 1985 and 1986. A Field Elements Study (FES) was completed by HMM Associates, Inc. (HMM) in 1990



based upon analyses of the results of sampling activities completed during 1989. The FES was performed to address certain technical issues that were not fully evaluated in the RI. The original Feasibility Study (FS) was completed by HMM in February 1991.

Based upon the results of the RI, FES, and 1991 FS, the original Record of Decision (ROD) was issued by the USEPA on September 10, 1991, and a Consent Decree for Remedial Design/Remedial Action between the USEPA and the Dover Group was finalized on August 7, 1992.

The source control remedy selected in the 1991 ROD (Alternative SC-7/7A) included removal and consolidation of arsenic-impacted sediments from the drainage swale between the Landfill and the Cocheco River, installation of a cap on the Landfill meeting Resource Conservation and Recovery Act (RCRA) Subtitle C standards, and collection and on- or off-site treatment of COC-impacted ground water (leachate).

Since the 1991 ROD was issued, detailed investigation activities were completed during the Southern Plume Pre-Design Investigation (SEA Consultants, Inc. [SEA], 1994), 1995 PDI (Golder Associates, Inc. [Golder], 1995), and associated environmental monitoring program (EMP; Golder, 1993 to present). Initial focused investigation activities completed after the 1991 ROD was issued included the Trench and Swale Characterization (GeoInsight, Inc. [GeoInsight], 1998) and the Draft Final Bioremediation Pilot Assessment (Envirogen, Inc. [Envirogen] and XDD, 2001).

In 1994, while the design of the 1991 ROD remedy was in progress, the Dover Group reviewed innovative remedial methods to identify potential approaches that could offer a more cost-effective, permanent treatment of the target COCs at the Landfill than the long-term containment remedy identified in the 1991 ROD.

In May 1996, GeoInsight completed a focused feasibility study (FFS) for the Landfill. The objective of the FFS was to compare the selected 1991 ROD remedy to two in situ



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alternatives that appeared to be applicable based upon site-specific technical data and recent advances in remedial technologies since the 1991 ROD was issued. The in situ alternatives evaluated in the FFS included a biowall (aerobic treatment trench) and an in situ treatment zone.

Based upon the results of a treatability study (Envirogen, 1995), field sparging study (Envirogen, 1996), and the FFS (GeoInsight, 1996), the USEPA and the New Hampshire Department of Environmental Services (NHDES; the "agencies") approved implementation of a bioremediation treatment zone pilot study, a field demonstration of an in situ biodegradation remedy. The bioremediation pilot was performed by the Dover Group between 1996 and 2001 under an Administrative Order by Consent signed in 1997. The results of the bioremediation pilot project were described in the Draft Final Bioremediation Pilot Assessment (Envirogen and XDD, 2001), which was reviewed, but not approved, by the NHDES and USEPA. The evaluation of that report by the NHDES is described in a letter dated April 23, 2002 (included in Appendix A of the USEPA's January 30, 2004 RFFS Addendum).

Based upon discussions with the USEPA and NHDES, it was agreed that site-specific information derived from previous studies would form the basis for an evaluation of the Landfill bioreactor/aerobic treatment trench remedy compared to the 1991 ROD source control remedy. To complete the required evaluation of the alternative remedy, the 1996 FFS was revised, and the results were presented in the January 30, 2004, Draft RFFS (GeoInsight, 2004).

Prior to evaluating remedial alternatives, the previous risk characterization was updated to account for current Landfill conditions and changes in toxicological information and assumptions used in risk assessment. The results of then-current EMP monitoring events (August 2000, December 2000, and Summer 2001) were used to evaluate whether conditions at the Landfill and the associated risk to human health and the environment had changed significantly since the 1991 FS was completed. The results of the risk characterization



update were used to assist in evaluating the remedial action objectives that were originally developed during the 1991 FS and for revising these objectives, as warranted. Based upon the revised remedial action objectives, the 2004 RFFS included a detailed evaluation of four remedial alternatives:

- the No Action Alternative (designated SC-1 and MOM-1);
- the 1991 ROD Remedy (designated SC-7/7A and MOM-2/4);
- the Alternative Remedy (designated SC-A and MOM-2); and
- the Mixed Alternative Remedy (designated SC-A and MOM-2/4).

Section 2.0 of the 2004 RFFS summarized the Risk Characterization update, Section 3.0 of the 2004 RFFS summarized the revision of remedial action objectives, and Section 5.0 of the 2004 RFFS summarized the detailed analysis of remedial action alternatives.

Based upon the 2004 RFFS, as qualified by USEPA's RFFS Addendum and discussion with the agencies, the 2004 (Amended Record of Decision) AROD identified the Mixed Alternative Remedy (SC-A and MOM-2/4) as the selected remedial approach for the Landfill. The Mixed Alternative Remedy was described on page 42 of the 2004 AROD.

The 2004 AROD also required that several PDIs be performed to further evaluate conditions in certain areas of the Landfill to support design of the selected remedy. A summary of PDIs and objectives completed since the 2004 AROD was prepared is included in Section 1.4.6 of the Source Control Focused Feasibility Study (SCFFS; GeoInsight, February 20, 2009) described below.

The SCFFS (GeoInsight, February 20, 2009) compared one component of the source control remedy, the air sparging trench (SC-A), with an alternative remedy (SC-Ex) that involved the use of an extraction well system located at the downgradient toe of the Landfill to intercept and transfer impacted ground water for off-site treatment at the Dover publicly owned



treatment works (POTW). This evaluation was prompted by and premised, in part, upon evaluation of new information that included:

- Southern Plume PDI results indicating that the plume center of mass was located relatively close to the southwest corner of the Landfill footprint (i.e., within approximately 200 yards);
- data from the Northwest Landfill PDI indicating an area of relatively high concentrations of target COCs in northwestern corner of the Landfill; and
- data from the Air Sparging Trench PDI indicating the absence of other localized areas of significant COC impacts within the Landfill footprint and at its downgradient perimeter.

Based upon review of the 2009 SCFFS and discussions with the Dover Group, USEPA prepared an Explanation of Significant Differences (ESD) to change one component of the approved 2004 AROD source control remedy. A public meeting was held on April 27, 2009 to provide a summary of the ESD and request public comment. A 30-day comment period was open on April 27, 2009. The ESD was issued by USEPA on June 30, 2009.

1.5 PRIOR REMOVAL AND REMEDIAL ACTIVITIES

This section provides a summary of removal and remedial activities that have already been completed at the Landfill. To date, remedial activities that have been completed at the Landfill have focused upon conditions within the perimeter ditch and swale. These remedial activities included the characterization and remediation of impacted sediment that was performed in December 1998, and the stabilization of conditions at the southeast end of the perimeter ditch and the head of the swale.

Assessment activities were completed in 1997 to evaluate conditions in the perimeter ditch and drainage swale. The results of sediment, surface water, and air analyses performed in December 1997, an evaluation of the potential risks associated with the environmental conditions of the perimeter ditch and drainage swale, and proposed interim remedial actions

to manage potential risks (during the period of the bioremediation pilot project) were summarized in the October 1998 Trench and Swale Characterization Report (GeoInsight, 1998).

The proposed interim remedial action for the drainage swale sediment was consistent with the draft Final (100 percent) Design Report for the 1991 ROD Remedy (Golder, 1996). The interim remedial actions for the perimeter ditch consisted of focused sediment hotspot removal and sediment containment through the installation of weirs, traps, and other migration barriers upstream of the discharge to the drainage swale (i.e., within the southeast end of the perimeter ditch).

The interim remedial activities were described in the 2001 report titled "Remedial Action Summary Report - Interim Remedial Action Perimeter Trench and Swale" (GeoInsight, 2001). Analytical data summary tables from the 2001 Interim Remedial Action Summary Report were included as Appendix D-2 of the 2004 RFFS. The response letter from the NHDES dated November 6, 2002 regarding the Interim Remedial Action Summary Report was included in Appendix D-3 of the 2004 RFFS.

1.6 SUMMARY OF MAJOR FINDINGS OF INVESTIGATION ACTIVITIES

Figure 3 of the 2004 AROD (page 28) presents a generalized depiction of environmental conditions associated with the Landfill. A Conceptual Site Model was presented by USEPA in the 2004 AROD (page 30) that identified the primary sources of impacts and the potential exposure pathways.

A summary of major findings associated with historical characterization and pre-design activities at the Landfill is presented in the following bullets.

the primary COCs for the Landfill are VOCs and arsenic;



- impacted soil and ground water is located under the Landfill;
- arsenic-impacted sediments were identified in the perimeter ditch and drainage swale;
- impacted ground water is migrating from the Landfill toe primarily within two plumes that were identified as the Eastern and Southern Plumes; the Eastern Plume originates under the eastern portion of the Landfill and flows to the east toward the Cocheco River; the Southern Plume originates under the western portion of the Landfill and extends approximately 600 feet to the south of the west portion of the Landfill (the Southern Plume is the focus of remedial actions described in this Interim RA Report);
- ground water impacts in the Eastern Plume are primarily located at depths greater than 15 feet within the Upper Upper-Interbedded (UUI) stratigraphic unit and are not present in shallow ground water in the area of residents along Tolend Road;
- the Group is conducting characterization activities associated with three localized areas along the western bank of the Cocheco River where Landfill leachate impacts to sediment have been observed;
- ground water impacts in the Southern Plume are located at depths between approximately 35 and 50 feet below ground surface (BGS), within the UUI stratigraphic unit (GeoInsight, 2007); the dissolved plume located in the UUI stratigraphic unit extends a distance of approximately 600 feet south of the western toe of the Landfill, within an area that is characterized by slow ground water flow velocities (single digits to tens of feet per year);
- VOC impacts within ground water at the Landfill have decreased over time since the Landfill was closed, apparently through natural attenuation and degradation processes associated with continued flushing of water through the Landfill;
- a Hot Spot of VOC impacts was identified in the northwest portion of the Landfill that contributes to VOC impacts to surface water in the northern perimeter ditch; based on the results of investigation activities completed in 2007, the Dover Group designed an air-sparging/soil vacuum extraction (AS/SVE) system to address VOC impacts in the Hot Spot; the AS/SVE system was constructed in 2008 and 2009 and became operational in August 2009; and
- additional evaluation of the Landfill area did not identify other Hot Spot sources.

Site Location: Dover, New Hampshire



The Southern Plume MOM RA is one of four primary remedial components associated with the 2004 AROD and 2009 ESD. These primary RA components and their relationship to the Southern Plume MOM RA are as follows:

- Source Control (SC): consisting of a network of nested extraction wells located along southern toe of the Landfill and conveyance of extracted ground water to the Dover POTW for treatment. It is expected that operation of the SC remedy along the western portion of the Landfill toe will likely influence the Southern Plume MOM remedy. In particular, the results of preliminary model simulations suggest that the operation of the SC remedy will cut-off the migration of impacted ground water from beneath the Landfill to the south into the Southern Plume area, and that hydraulic influences associated with the operation of the SC extraction system may "pull back" impacted ground water that is located within several hundred feet of the toe of the Landfill. These issues will be evaluated during SC design activities, and will be monitored during Southern Plume operation and monitoring (O&M).
- Northwest Landfill Hot Spot: consisting of an SVE/AS remedial system located within the northwest portion of the Landfill that is focused upon removing residual VOCs from the Landfill waste material and within the Upper Sand (US) stratigraphic unit. Because of the distance between them, and the relatively localized focus for each system, operation of the Southern Plume MOM RA is not expected to materially affect the Northwest Landfill remedial activities (and vice versa).
- Eastern Plume MOM: consisting of the natural attenuation of ground water impacts to the east of the Landfill after SC remedial actions are operational and functional (i.e., the operation of the ground water system along the toe of the Landfill cuts off the continued migration of impacted ground water from the Landfill). Because of the distance between them, and the relatively localized focus of Southern Plume MOM extraction system, the Eastern Plume natural attenuation MOM RA is not expected to be significantly affected by the Southern Plume MOM RA.
- Southern Plume MOM: consisting of the localized extraction of ground water within the Southern Plume to restore ground water to be protective of human health and the environment within a reasonable time frame and limit the further migration of impacted ground water and the conveyance of extracted water to the Dover POTW for treatment. This remedial component is the focus of this Interim RA Report.

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The location of Southern Plume extraction wells and performance monitoring locations are shown on Figure 3. The Southern Plume MOM RA area consists of approximately 90 to 100 acres of wetlands, forested wetlands, and densely vegetated woodlands located between the Landfill and the north bank of the Bellamy Reservoir. The area is currently accessed by a dirt path that originates along Tolend Road to the south of the Landfill, and the westward extension of the access road that is located on the top of the Landfill. Properties within the Southern Plume MOM RA area are primarily owned by the City of Dover.



2.0 SOUTHERN PLUME BACKGROUND

2.1 ROD/AROD REQUIREMENTS

The 2004 AROD lists RAOs for Ground Water/Surface Water – Off-Site on page 41 that were retained from the 1991 ROD. These RAOs apply to both the Eastern and Southern Plumes, and include:

- Eliminate or minimize the contaminants in the ground water and leachate emanating from and downgradient of the Landfill. The off-Site contaminated ground water will be compared to Maximum Contaminant Levels (MCLs). If no MCL or non-zero Maximum Contaminant Level Goal (MCLG) exist, a target level for treatment of that contaminant will be used. This target level will be established to be protective of human health and the environment.
- Eliminate or minimize the threat posed to the public health and surrounding environment by the current extent of the contaminated ground water, including potential indoor air exposures.
- Prevent the discharge of impacted ground water from the Site from entering surface water bodies above concentrations that are protective of human health and the environment.
- Comply with federal and State Applicable or Relevant and Appropriate Requirements (ARARs).

The performance standards for the Southern Plume were presented in Section 4.1.1 of the 2009 Statement of Work (SOW), and include:

- ground water in the Southern Plume will be restored by extracting contaminated ground water and treating it to appropriate standards;
- the ground water extraction and treatment system for the Southern Plume will be
 operated in a manner that will restore ground water in this portion of the aquifer to
 contaminant concentrations protective of human health and the environment within a
 reasonable time, and that will prevent migration of contaminants exceeding interim
 cleanup levels (ICLs) to the Bellamy Reservoir;

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 using procedures defined in 40 CFR Section 264.97, the Work Settling Defendants shall demonstrate that the ICLs within the Southern Plume have been attained and maintained for a period of one year before requesting that the pump-and-treat system be deactivated;

- once the system is deactivated, the Work Settling Defendants shall demonstrate through monitoring that the ICLs are being maintained within the Southern Plume until the site-wide remedial action as described in Section 10 of the 2009 SOW, is complete;
- once the system is deactivated and before issuance of a Certificate of Completion as
 described in Section 10.4 of the 2009 SOW, routine maintenance of the pump-andtreat system shall occur and system readiness shall be such that it can be re-activated
 and at full operation within 30 days of notice by USEPA; and
- if, at any time, USEPA determines that monitoring data indicate ICLs are not being maintained within the Southern Plume, Work Settling Defendants shall resume active ground water pump-and-treat.

The 2009 ESD documented one change to the Source Control RA. The ESD did not change the RAOs for the Southern Plume MOM RA.

2.2 BASIS FOR CLEANUP GOALS AND PLANNED FUTURE USE

The ROD/AROD interim cleanup levels (ICLs) were based upon federal MCLs. The MCLs are considered consistent with NHDES Ambient Groundwater Quality Standards (AGQSs), which are typically employed as cleanup goals under the NHDES program for state-listed hazardous waste sites.

The Southern Plume MOM area is located within a forested wetland area of Dover and Madbury, New Hampshire. The wetland area is not currently suitable for development. Because of limitations on development activities in wetlands much of the land potentially affected by ground water impacts associated with the Landfill is not suitable for future development. There are no current policy initiatives, either federal, state, or local, to significantly change existing restrictions to filling wetland areas for development purposes.

The area where the leading edge of the Southern Plume was delineated is included in Groundwater Management Zone (GMZ) described in Section 6.2. Furthermore, the area of the Southern Plume is either owned by the City of Dover or included in the Madbury Well Prohibition Area, also described in Section 6.2.

2.3 SUMMARY OF REMEDIAL DESIGN

2.3.1 Overview of Remedial Design

The conceptual approach for the Southern Plume MOM RA was to employ GWE methods to limit migration of dissolved COCs in the southerly direction toward the Bellamy Reservoir and restore ground water to protective levels within a reasonable time frame. Historical characterization activities identified the "leading edge" of the plume within a relatively narrow lobe that is located approximately 600 feet from the toe of the Landfill. The results of historical hydraulic characterization activities indicated that ground water flow velocities are very low within the Southern Plume area (as described below). Therefore, the conceptual approach for the Southern Plume MOM GWE system was to rely upon existing wells that were positioned near the leading portion of the plume to limit the continued migration of the plume in a southward direction, while minimizing "pulling" additional impacted ground water from the area near the toe of the Landfill. Because the area to be addressed consists of a relatively remote forested wetland that does not include existing infrastructures and utilities, and the anticipated slow rate of ground water flow (and thus, plume migration), the GWE system was designed to operate seasonally during periods when temperatures are consistently above freezing (typically, from April to December).

The current Southern Plume MOM GWE system includes extracting ground water from two existing wells, the temporary storage of extracted ground water in a fractionation (frac) tank located at the southwest corner of the Landfill, and the regularly scheduled transfer of this water to the municipal sewer system for treatment at the City of Dover POTW.

2.3.2 Regulatory Considerations

Site Location: Dover, New Hampshire

Regulatory considerations for the construction and operation of the Southern Plume GWE system included:

- adherence to the City of Dover Sewer Code that includes local limits and screening levels for water discharged to the POTW system; and
- designing components/systems and using methods that meet the substantive requirements of wetlands regulations to minimize impacts to wetlands during construction and operation and maintenance activities.

2.3.3 Technical Considerations

Based upon several site-specific technical considerations, the GWE system was designed to operate seasonally during periods when aboveground handling of water will not be affected by freezing conditions. Site-specific conditions that were evaluated with regard to the design and operation of the GWE system, and suitability for the Southern Plume MOM RA, included:

- relatively low horizontal hydraulic gradients (0.002 to 0.004 feet per foot; Table 1-1 of the 2004 RFFS) and relatively slow ground water flow velocities (0.1 to 0.5 feet per day; Table 1-2 of 2004 RFFS) within the Southern Plume Study Area;
- relatively low anticipated extraction rates (0.5 to 1.5 gallons per minute [gpm]) associated with the UUI stratigraphic unit in the area to the west and southwest of the Landfill where the plume was identified at depths between 35 and 50 feet BGS;
- relatively small daily volumes of extracted ground water (2,800 gallons per day [gpd]);
- relatively remote locations for the portion of the Southern Plume to be addressed (general vicinity of the SB-B well nest and MW-206(I)) and the absence of readily available access, infrastructure, and utilities within this area;

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- general physical characteristics of the area occupied by the Southern Plume, including densely forested wetland with appreciable standing water (seasonally) and shallow water table;
- presence of existing infrastructure (i.e., Butler Building, phone line, electricity, storage pad, and truck turnaround) at the southwest corner of the Landfill; and
- presence of existing monitoring wells located in optimal locations (i.e., within center of plume) that could be used for extraction.



3.0 DESCRIPTION OF CONSTRUCTION ACTIVITIES

The sequence of construction activities is summarized below.

DATE	CONSTRUCTION ACTIVITIES	
2007		
November 14 to 28, 2007	Installed Southern Plume GWE system (components delivered to Landfill, pumps installed in wells, wiring and piping connected to system, etc.).	
November 29, 2007	Testing of system operation initiated.	
December 3, 2007	Remedial system shut-down and winterizing activities were completed at the Landfill.	
2008		
April 16, 2008	Start up GWE system for 2008 season - extraction wells MW-206(I) and SB-4D.	
April 30, 2008	Installed siphon relief valves, extended influent lines to the bottom of the frac tank, removed cycle counters from compressor manifold and installed them in-line near the pumping wells, moved sample ports to ground level.	
November 4, 2008	Replaced influent water lines in frac tank – tubing was clogge with iron scale and sediment.	
November 18 to 20, 2008	Installation of performance monitoring wells.	
November 25, 2008	Remedial system shut-down and winterizing activities were completed at the Landfill.	
2009		
March 18, 2009	Installed influent manifold, including totalizers, new sample ports, and associated piping.	
April 29, 2009	Start up GWE system for 2009 season - extraction wells MW-206(I) and SB-4D.	
July 7, 2009	Switched pumps in MW-206(I) for maintenance and cleaning.	

Photographs of the system installation are included in Appendix A.



September 14, 2009

4.0 CHRONOLOGY OF EVENTS

4.1 SUMMARY OF MAJOR EVENTS AND MILESTONES

Major events and milestones associated with the Southern Plume MOM RD and RA are summarized in the following table.

DATE	MAJOR EVENTS AND MILESTONES	
2007		
November 6, 2007	USEPA requested conceptual design and operating parameters for a Pilot Test for the Southern Plume MOM GWE system.	
November 15, 2007	An application for the discharge permit from the City of Dover POTW was prepared and submitted.	
2008		
February 22, 2008	Technical Memorandum for Ground Water Extraction System	
August 21, 2008	100 Percent Remedial Design and Operation and Monitoring Manual for the Southern Plume MOM were submitted to the Agencies.	
April 16 to June 17, 2008	Pilot testing period. Pumping test analyses performed using this data set.	
June 20 to November 25, 2008	First Southern Plume MOM RA season.	
September 11, 2008	USEPA conditionally approved the 100 Percent Design submittal and requested that the report be revised to include responses to Agency conditions.	
September 26, 2008	A revised version of the 100 Percent Remedial Design and Operation and Monitoring Manual was submitted.	
November 18 to 20, 2008	Five performance monitoring wells were installed in the Southern Plume MOM RA area.	
November 25, 2008	Remedial system shut-down and winterizing activities were completed at the Landfill.	
2009		
February 18, 2009	An application for the discharge permit from the City of Dover POTW was prepared and submitted.	

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DATE	MAJOR EVENTS AND MILESTONES	
2009 (continued)		
April 16, 2009	Seasonal baseline gauging.	
April 27 and 28, 2009	Seasonal baseline ground water monitoring event.	
April 29, 2009	Seasonal system startup.	
July 15, 2009	Ground water performance monitoring event.	

4.2 CLEANUP GOAL TIMEFRAMES AND GROUND WATER RESTORATION

The timeframe to achieve cleanup goals and ground water restoration will depend upon the implementation of the SC GWE remedy at the toe of the Landfill. The Source Control GWE system will include a linear network of ground water extraction well nests along the toe of the Landfill. The extraction well nests will be screened at multiple vertical intervals. When constructed, the SC GWE system will be operated continuously (i.e., all year long). The SC GWE system will be designed during the fall and winter of 2009, and the system is expected to be constructed during 2010. The SC GWE system will include construction of a permanent water conveyance system that will extend from the Landfill to the portion of the existing municipal sewer system to be extended along Tolend Road that has available flow capacity. The Southern Plume MOM RA will ultimately be connected to the permanent water conveyance system that is installed as part of the SC GWE system.

Plume attenuation time periods were evaluated in fate and transport model simulations prepared for the 2004 RFFS. The simulations indicated that for the 1991 ROD Remedy, the time for the Southern Plume ground water to achieve ICLs/AGQSs after the SC remedy had been installed and was operational would range from 2 years (average literature degradation rate) to 18 years (minimum literature degradation rate) for VOCs. The 1991 ROD Remedy included capping of the Landfill. Additional modeling efforts were performed for the Alternative Remedy in the 2004 RFFS that did not include a Landfill cap. The simulations indicated that for the Alternative Remedy (i.e., a treatment trench), the time for the Southern Plume ground water to achieve ICLs/AGQSs after the SC remedy had been installed would

Site Name: Dover Municipal Landfill Superfund Site Site Location: Dover, New Hampshire

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range from 2 years (average literature degradation rate) to 17 years (minimum literature degradation rate) for VOCs.

Once continued migration of impacted ground water from the western portion of the Landfill is controlled by the SC GWE remedy, attenuation and ground water extraction efficiency associated with the Southern Plume MOM RA will be re-evaluated. On-going monitoring of COC concentrations and review of hydraulic data will be performed as part of Southern Plume optimization activities, as described in Section 11 of the 100 Percent Remedial Design Southern Plume MOM report.



5.0 PERFORMANCE STANDARDS AND QA/QC PROCEDURES

5.1 OVERALL PERFORMANCE AND COMPARISON TO CLEANUP GOALS

The Southern Plume MOM RA is in the second year of operation. Performance monitoring wells were installed in late 2008 in the anticipated area of hydraulic influence for extraction well MW-206(I). One baseline monitoring event was performed in April 2009 and the first performance monitoring event was conducted in July 2009.

After the 2009 seasonal operational year is completed, and two additional performance monitoring events are conducted, available data will be evaluated using the following approaches:

- trend and other appropriate statistical analyses will be used to evaluate changes in VOC concentrations within and downgradient of the Southern Plume;
- trend and other appropriate statistical analyses will be used to evaluate changes in hydraulic conditions within and between monitoring wells within the Southern Plume;
- VOC distribution and concentrations will be mapped and compared over time within the Southern Plume (in plan and cross-section view); and
- extraction well performance data will be reviewed.

The initial focus of the performance evaluation for the Southern Plume GWE system will be to evaluate the ability of the GWE system to limit migration of dissolved impacts to the south and the extent of hydraulic control associated with the system. However, it should be noted that hydraulic and plume conditions within the Southern Plume MOM area are expected to be impacted once the SC GWE system along the toe of the Landfill is operational and functional. Design activities associated with the SC GWE system will include an evaluation of possible impacts to the Southern Plume MOM GWE system.

5.2 INTERIM RESULTS

Performance monitoring data related to COC concentrations and mass removal collected to date are presented in Tables 1 to 5, and in Appendix B. A preliminary assessment of these data will be included in the October 10, 2009 Periodic Remedy Performance Report.

Mass removal estimates presented in Tables 5A and 5B were calculated based upon the average concentrations of the two primary Southern Plume VOCs (tetrahydrofuran [THF] and benzene) and the overall total volume extracted during the operational period from wells MW-206(I) and SB-4D. The mass removal for 2008 was approximately 5 pounds. For 2009, VOC mass removal for the period between April 29 and July 28 was estimated to be approximately 2 pounds.

5.3 ASSESSMENT OF PERFORMANCE DATA QUALITY

For this Interim RA Report, a preliminary assessment of performance data quality, including overall quality of analytical data, quality assurance and quality control (QA/QC) procedures and compliance with the project Quality Assurance Project Plan (QAPP), and comparison of data with data quality objectives (DQOs) was performed.

In general, based upon the results of the preliminary assessment, it was identified that:

- samples were managed under Chain of Custody protocols and delivered to the contract laboratory selected to perform analyses to evaluate compliance with the Dover POTW discharge thresholds (RL laboratory) or to evaluate VOC concentrations in performance monitoring wells (Katahdin);
- analytical methods used by the laboratory for assessment and characterization activities were consistent with methods described in the QAPP;
- analytical detection limits were achieved to illustrate compliance with POTW local limits and screening levels identified in the Dover Sewer Code for discharge of extracted water to the POTW system;



- sample holding times were not exceeded;
- sample preservation and handling methods for samples collected for assessment and characterization activities were performed in accordance with the project QAPP;
- field duplicates were collected during each monitoring event and trip blanks were included with each sample batch;
- field equipment was calibrated and maintained, and these activities were recorded on calibration record sheets for each field event;
- analytical data presented in tabular form are presented with applicable standards for comparative purposes (i.e., COC concentration thresholds for discharge to the POTW, or ICLs);
- ground water sampling, drilling, well construction, and well development activities were generally performed as described in Standard Operating Procedures (SOPs) included in the QAPP;
- hydraulic ground water elevation data are measured continuously with pressure transducers, and manual measurements are performed periodically to evaluate transducer calibration as described in the SOP included in the QAPP; and
- field data records (FDRs) are completed for each operation and monitoring event and records are maintained electronically.



6.0 FINAL INSPECTION AND CERTIFICATIONS

6.1 ADHERENCE TO PROJECT HEALTH AND SAFETY PLAN

For this Interim RA Report, a preliminary assessment of adherence to the project Health and Safety Plan (HASP) identified the following:

- appropriate signage was posted in the Butler Building to notify personnel that eye
 wear and hearing protection is required to enter Butler Building where the air
 compressor is located;
- lock-out / tag-out procedures are used when performing maintenance on the ground water extraction system;
- appropriate personal protective equipment (PPE) was used during operation and maintenance events, and performance monitoring events;
- a copy of the HASP was readily available during field activities;
- tailgate safety meetings were performed prior to ground water sampling, drilling, and other field events;
- during subsurface investigation activities, ambient air field screening was performed to evaluate conditions in the work zone; and
- field personnel performing activities associated with the Southern Plume MOM RA
 have completed the Occupation Safety and Health Administrator (OSHA) 40-hour
 training, annual 8-hour refreshers, and participate in a medical surveillance program.

6.2 SUMMARY OF INSTITUTIONAL CONTROLS

Since the detection of impacts to ground water in the vicinity of the Landfill in the late 1970s, measures have been taken to limit potential exposure to conditions associated with the Landfill. This section provides a brief summary of the risk management measures that have been implemented at the Landfill.

Site Location: Dover, New Hampshire



 the City of Dover extended the municipal water supply line to residences located along Tolend and Glen Hill Roads in 1981 and 1982 (residences in these areas were previously served by private wells);

- at approximately the same time that the municipal water line was installed, a metal chain-link fence and gates were constructed along Tolend Road to the north and south of the Landfill entrance, and a chain-link fence and metal gate were also installed at an ancillary access road near the northwest corner of the Landfill;
- the Landfill area was also posted with "No Trespassing," "No Hunting," and "Hazardous Materials Present" signs;
- in May 1987, the City of Dover instituted Ordinance Number 9-87 that established a Hazardous Waste Landfill District designed to alert the public and prohibit development activities in areas potentially affected by the Landfill until final cleanup and proper closure is completed;
- in May 1991, the City of Dover instituted Ordinance Number 13-91 that prohibited the installation or use of a private well within 1,500 feet of the Landfill except for purposes related to the cleanup, testing, and remediation associated with the Landfill;
- in August 1992, the Town of Madbury adopted a protective zoning district referred to
 as the Tolend Landfill Overlay District that prohibited the installation of wells, other
 than those directly related to the cleanup, testing, and remediation of the Landfill; the
 overlay district includes all properties located within the Town of Madbury that are
 located between the Landfill and the Bellamy Reservoir and, to the west, the
 associated Mallego Brook (which was dammed to create the Bellamy Reservoir);
- in 2001, the City of Dover purchased the last privately owned parcel of land located adjacent to the Landfill; therefore, the City currently owns the land located adjacent to the east, northwest, west, and south of the Landfill (the land to the north and northeast of the Landfill is occupied by Tolend Road); and
- in March 2009, NHDES issued a Groundwater Management Permit (GMP) to the Group associated with the Landfill; the boundaries of the Groundwater Management Zone (GMZ) coincide with the boundaries of several properties owned by the City of Dover and properties that are already subject to the Dover and Madbury ordinances described above.

6.3 OPERATION AND FUNCTIONAL STATUS

The final inspection was performed by Darryl Luce of USEPA on May 15, 2009.



FAME DESCRIPTION AND DESCRIPTION

7.0 OPERATION AND MONITORING ACTIVITIES

7.1 POST-CONSTRUCTION O&M ACTIVITIES

The post-construction operation and maintenance, and monitoring schedule was presented in Table 5 of the September 26, 2008 O&M Plan. An updated copy of the table is attached in Appendix B. In general, operation and maintenance of the GWE system is monitored on a weekly basis. Weekly site visits include:

- collecting influent water samples from the pumping well(s) to be submitted for laboratory analysis of VOCs by USEPA Method 8260B and THF;
- monitoring discharge of extracted ground water to the municipal sewer system for treatment at the POTW;
- gauging depth to water and depth to bottom in the active extraction well(s);
- recording system parameters (e.g., flow rate, totalizer readings, air pressure);
- inspecting system components (e.g., electric air compressor, pressure regulators, nylon air and water lines, well head connections, pneumatic pumps, and high water float sensor); and
- conducting routine maintenance activities in accordance with the manufacturers' suggested maintenance schedule.

On a monthly basis, water samples are collected from the frac tank to evaluate compliance with Dover POTW requirements. The water samples are analyzed for the parameters consistent with the Dover POTW monitoring requirements summarized in Table 1 of the 100 Percent Remedial Design Southern Plume MOM report. Analytical results are summarized in Tables 2A and 2B.

To evaluate hydraulic conditions in the vicinity of the Southern Plume GWE system, ground water elevations are collected from monitoring wells located throughout the Southern Plume MOM RA area prior to and following seasonal system operation. Wells included in the



gauging events are positioned in multiple stratigraphic units located within and beyond the anticipated limit of hydraulic influences associated with the Southern Plume GWE system. In addition to semi-annual gauging events, continuous hydraulic influence of the GWE system is monitored using pressure transducers installed in key monitoring wells in the same stratigraphic interval as the pumping wells (i.e., the UUI unit), and in wells screened in the US and Lower Upper Interbedded (LUI) units (i.e., at elevations above and below the pumping interval). Data are downloaded from the pressure transducers and reviewed on a quarterly basis. Wells that are included in the continuous monitoring program are summarized in Appendix B.

Baseline ground water quality conditions are established at the start of each field season (i.e., prior to GWE system start up) by collecting samples of ground water from monitoring wells located upgradient, within, and downgradient of the Southern Plume area. Wells included in the baseline monitoring event are summarized in Appendix B and include wells positioned in multiple stratigraphic units.

Focused ground water monitoring (i.e., performance monitoring) events will be conducted during the period of GWE system operation to monitor VOC concentrations in the Southern Plume area and to support evaluation of remedy performance. Therefore, these ground water monitoring events are focused upon monitoring wells located within the portion of the Southern Plume that is expected to be influenced by extraction well MW-206(I). Wells included in the focused ground water monitoring event are summarized in Appendix B and include wells located within the same stratigraphic unit as the pumping well.

7.2 PROBLEMS AND CONCERNS

The following problems and concerns were identified during seasonal operation of the Southern Plume GWE:



Issue/Concern	Impact	Mitigation Approach (if applicable)
OPERATIONAL I	SSUES	
silt in well screen	limits vertical thickness of water column in extraction well, can interfere with pump operation	periodic well clearing using vacuum truck to remove accumulated silt; well screen and sand pack design will be evaluated for potential future extraction well installation
iron precipitate in pumps	causes pump to seize and stop pumping, can allow compressed air to bypass pump and blow out totalizer	a third pump was purchased so that an alternate pump was available while the impacted pump was removed and scrubbed with steel wool and soaked in muriatic acid to remove scaling
iron precipitate in tubing	causes tubing to clog and limit flow	sections of piping were cut out and extended using new piping
freezing temperatures	causes pumping to stop	monitor weather for early seasonal freeze
well diameter	limits the size of pumps that can be used for extraction	install larger diameter wells if needed in the future
pneumatic pump model	model type is sensitive to silt and iron accumulation, requires monitoring and maintenance	alternative pneumatic pumps will be evaluated for models that may be better suited for existing conditions (i.e., elevated concentrations of dissolved iron)
MONITORING IS	SUES	ON - 0210-000-01
transducers data anomalies	caused by inadvertent human tampering with transducers at the well head	document and record sampling events by other contractors on the Landfill (i.e., EMP events)
silt in extracted water	clogs totalizers	silt traps may be useful, will be evaluated for future modifications; also alternative totalizer models are being evaluated
freezing temperatures	causes shallow ground water in monitoring wells to freeze	reviewer must note seasonal freezing conditions during data interpretation
remote location of extraction wells	difficult to access well heads because roadways were washed out or rutted	road to extraction well MW-206(I) was upgraded with stone to allow access by large trucks



7.3 FUTURE GROUND WATER RESTORATION ACTIVITIES

Monitoring data obtained while operating the Southern Plume GWE system will be used to monitor and evaluate the progress of ground water restoration. The evaluation will include:

- using trend and other appropriate statistical analyses to evaluate changes in VOC concentrations within and downgradient of the Southern Plume;
- using trend and other appropriate statistical analyses to evaluate changes in hydraulic conditions within and between monitoring wells within the Southern Plume; and
- mapping and comparing VOC distribution and concentrations over time within the Southern Plume (in plan and cross-section view).

Monitoring data obtained while operating the Southern Plume GWE system will be used to evaluate possible remedial system enhancements. The evaluation will also include information obtained from the Environmental Monitoring Program and remedial actions elsewhere at the Landfill, including the Northwest Landfill air sparging/soil vapor extraction system and the Source Control GWE system along the toe of the Landfill.

Based upon the current understanding of conditions within the Southern Plume, possible system enhancements may include:

- installing additional ground water extraction wells within the Southern Plume;
- modifying ground water extraction rates;
- evaluating use of alternative pumps;
- evaluating use of alternative pumping schedules (such as pulsed systems); and
- assessing the utility of possible system tie-ins with other remedies operating at the Landfill.



Information obtained while conducting the Remedy Performance and Optimization assessments will be summarized in annual Southern Plume MOM Remedy Performance Reports.

7.4 SOURCE CONTROL EFFECT ON IMPLEMENTATION OF MOM RA

Concurrent with Southern Plume MOM operation, a GWE remedy is being developed as a component of the Source Control remedy. The Source Control GWE system will likely include a linear network of ground water extraction well nests along the toe of the Landfill. The extraction well nests will be screened at multiple vertical extraction intervals. When constructed, the Source Control GWE system will be operated continuously. The Source Control GWE system will be designed during the fall and winter of 2009, and the system is expected to be constructed during 2010. The Source Control GWE system will include construction of a permanent water conveyance system that will extend from the Landfill to the portion of the existing municipal sewer system that has available flow capacity. The Southern Plume GWE system will ultimately be connected to the permanent water conveyance system that is installed as part of the Source Control GWE system.

Operation of the Source Control GWE system is expected to significantly affect hydraulic conditions in the vicinity of the southwest corner of the Landfill. During design of the Source Control GWE system, the existing Dover Landfill three-dimensional computer model will be used to evaluate likely hydraulic influences in the Southern Plume MOM RA area associated with operation of the Source Control GWE system along the toe of the Landfill. These simulations will include an evaluation of the estimated downgradient capture of the Source Control GWE system (which, based upon historical model simulations, could reach several hundred feet downgradient of the Landfill (XDD Memorandum, December 18, 2007 included in the SCFFS [GeoInsight, 2009]). Accordingly, possible effects on the estimated Southern Plume MW-206(I) capture zone induced by operation of the Source Control GWE system will need to be evaluated.

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Based upon currently anticipated project schedules, the Source Control GWE system will not be operational before the end of the 2009 field season. Therefore, the 2009 field season associated with the Southern Plume GWE system will be used to establish baseline hydraulic conditions associated with the MOM remedy. These baseline conditions will serve as the basis for evaluating possible affects on the operation of the Source Control GWE system. Consequently, a formal system optimization evaluation will be deferred until the Source Control GWE system has been operational for at least one field season. In the intervening period, interim performance assessments will be conducted using Southern Plume MOM monitoring data. These assessments will focus upon evaluating the area of hydraulic influence associated with extraction well MW-206(I) and local water quality trends with regard to restoration and controlling migration of the Southern Plume.



8.0 COST INFORMATION

The following summarizes activities associated with design and construction of the Southern Plume MOM RA.

2007

- installation of extraction well MW-206(I)
- construction of system equipment and labor including purchase of extraction well pumps, air compressor, and piping
- purchase of transducers for monitoring
- preparation of 30 Percent Design Technical Memorandum

2008

- system modifications at seasonal startup
- installation of five performance monitoring wells
- purchase of additional transducers for monitoring
- preparation of 100 Percent Remedial Design and OMM plan

2009

- system modifications at seasonal startup
- purchase of new extraction well pump

The approximate overall cost for design, pilot testing, hydraulic analyses, and construction of the Southern Plume MOM GWE system and monitoring system was \$200,000.



9.0 OBSERVATIONS AND LESSONS LEARNED

In addition to the observations presented in Section 7.2 regarding operational issues and concerns, GeoInsight provides the following additional observations based upon operation of the Southern Plume MOM GWE system to date:

- use of a pneumatic pumping system approach to ground water extraction eliminated the need to install electrical supply infrastructure and facilitated operation of extraction pumps at distances greater than 600 feet from the Butler Building;
- to measure the total volume of water extracted at each well, specialized flow totalizers will be needed to accommodate silty conditions and the pulsing flow patterns of the pneumatic pumps;
- use of continuous monitoring pressure transducers allow for complete review of seasonal hydraulic data and trends, identification of barometric and precipitation influences, and effects of extraction on the monitoring wells within the area of hydraulic influence;
- limitations in the frac tank storage capacity cause periodic system shut-downs interfering with continuous operation of extraction wells;
- silt extracted with ground water can interfere with pumping efficiency and volume estimates because of clogging of conveyance piping and totalizers; and
- iron precipitate and scaling within the extraction wells, pumps, and tubing may require periodic well inspections and cleaning to maintain pumping efficiency.



10.0 CONTACT INFORMATION

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TABLES

TABLE 1 SUMMARY OF PUMPING PERIODS SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Pumping Period Ini	Average System Flow Rate (gpm) itial Pilot Test	Wells Operating	Total Volume Extracted To Date (gallons)
November 29 to December 1, 2007	1.3	MW-206(I) SB-4D	7,115
Pil	ot Test Period		
April 16 to April 19, 2008	2.2	MW-206(I) SB-4D	15,441
May 1 to May 5, 2008	2.4	MW-206(I) SB-4D	30,605
May 12 to June 10, 2008	0.7	MW-206(I)	56,342
June 13 to June 17, 2008	0.7	MW-206(I)	60,590
2	2008 Season		
June 20 to July 15, 2008	1.3	SB-4D	104,782
July 15 to August 5, 2008	0.8	MW-206(I)	130,030
August 5 to November 11, 2008	1.4	MW-206(I) SB-4D	256,588
November 11 to November 25, 2008	1.4	SB-4D	273,588
2009	Season (to date)		
April 29 to July 28, 2009	1.7	MW-206(I) SB-4D	396,756

NOTES:

- 1. gpm = gallons per minute.
- 2. Average system flow rates were calculated using manual flow measurements collected throughout the specified pumping period. When more than one well was pumping, flow rates for the individual wells were added to calculate the system flow rate.

TABLE 2A TABLE 2A SUMMARY OF LABORATORY ANALYSES - FRAC TANK WITH POTW LOCAL LIMITS AND SCREENING LEVELS - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

					NEW HAMPSHIKE				
		Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water
		SB-4D and MW-206(I)	SB-4D and MW-206(I)	MW-206(I)	MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)
		FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK
Analyte/Parameter	Local Limit	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
Total Arsenic	0.4	0.09	0.30	0.030	0.051	0.050	0.032	0.015	0.036
Total Cadmium	0.02	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Chromium	4.03	<0.05	0.05	< 0.50	< 0.05	0.34	< 0.05	< 0.05	< 0.05
Total Copper	3.46	< 0.05	< 0.05	< 0.50	<0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Lead	0.806	< 0.01	< 0.01	0.38	< 0.008	<0.008	<0.008	<0.008	<0.008
Mercury	0.004	<0.009	<0.009	0.36	<0.009	<0.008	< 0.0009	< 0.0009	<0.0009
Total Nickel	1.07	<0.009	0.12	<0.50	<0.009	0.89	< 0.009	<0.009	<0.009
Selenium		<0.05		0.06					
	8.55		< 0.05		<0.05	<0.05	< 0.05	< 0.05	< 0.05
Silver	0.713	<0.007*	<0.007	<0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
Total Zinc	4.33	< 0.05	0.07	0.99	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cyanide	0.363	< 0.02	< 0.02	< 0.02		<0.02	< 0.02	< 0.02	< 0.02
Total Phenol	182	< 0.05	0.09	0.20	0.08	2.1	< 0.05	< 0.05	0.51
Analyte/Parameter	Screening Level	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
1,1,1-Trichloroethylene	1.55	<0.01**	<0.01**	<0.01**	<0.002**	<0.002**	<0.002**	<0.002**	<0.002**
1,1-Dichloroethane	4.58	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,2,4-Trichlorobenzene	0.43	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,2-Dichlorobenzene	3.74	< 0.01	< 0.01	< 0.01	< 0.002	0.002	0.003	0.003	0.002
1,2-Dichloropropane	3.65	< 0.01	< 0.01	< 0.01	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
1,3-Dichloropropene (Total)	0.09	<0.02	< 0.02	< 0.02	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,3-Dichloropropene (1 otai) 1,4-Dichlorobenzene	3.54	<0.02	<0.02	< 0.02	<0.004	<0.004	<0.004	<0.004	<0.004
2-Butanone (MEK)	249	< 0.05	< 0.05	< 0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acetone	1,176	< 0.25	< 0.25	< 0.25	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Acrylonitrile	1.24								
Bromomethane	0.002	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Carbon Disulfide	0.06	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chlorobenzene	2.35	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chloroform	0.42	<0.01	< 0.01	< 0.01	< 0.002	<0.002	< 0.002	< 0.002	<0.002
Chloromethane	0.007	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Dichlorodifluoromethane	0.04	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Ethylbenzene	1.59	0.015	0.21	0.25	0.018	0.009	0.014	0.009	0.012
Ethylene Dichloride	1.05	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Hexachloroethane	0.96	<0.002*	< 0.2	< 0.1					
Hexachloro-1,3-Butadiene	0.0002								
Methylene Chloride	4.15	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	3.34	< 0.025	0.031	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene									
Tetrachloroethylene	0.53	< 0.01	0.26	0.093	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	1.35	0.026	< 0.01	< 0.01	0.044	0.030	0.029	0.012	0.021
trans-1,2-Dichloroethylene	0.28	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Trichloroethylene	0.71	< 0.01	0.036	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Trichlorofluoromethane	1.22	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Vinyl Acetate	1.21						< 0.010	< 0.010	< 0.010
Vinyl Chloride	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Tinyi Cinoride	0.003	0.002	30.002	0.002	10.002	10.002	0.002	30.002	<0.002
Formaldehyde	0.07	0.069/0.084 ^A	0.10/0.036 ^A	1.5 ^B	0.051/0.653 ^C	0.590 ^D	0.076 ^D	0.13 ^D	0.087 ^D
1	İ	ĺ							
Heptachlor	0.003								
1	İ	İ	l	I	I	1		I	1
Sulfate	150/1,500								
Sulfide	1	< 0.04	< 0.04	0.07			< 0.04	< 0.04	< 0.04
Sulfite	2.00								
		1	I	I	I	1		I	ĺ
Oil and Grease	100		I						
			160						
Ammonia-N	90	58	160	28	70	63	72		
pH	<6.0 or >11.0	6.46	6.45	6.28	6.38^	6.22^	6.23^	6.26	6.23
Alkalinity (as CaCO3)	>75.0	530	1,100	1,800	630	540			
Biological Oxygen Demand	791	14	22	17	13	17	12	13	11
Total Suspended Solids	847	110	370	11,000	65	80	42	80	58
ADDITIONAL ANALYS	ES (NON-PERMIT) RI	EQUESTED BY POTW	i					i	
Analyte/Parameter	1	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
	-	0.007		0.53	< 0.006	< 0.006		< 0.006	< 0.006
Antimony	İ		0.01				<0.006		
Beryllium	1	< 0.004	< 0.004	0.01	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Molybdenum	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thallium	İ	< 0.004	< 0.004	< 0.004	0.005	< 0.004	< 0.002	< 0.002	< 0.002
İ	İ					1			
Tetrahydrofuran		3.0	1.8	1.8	1.3	1.7	1.5	2.3	2.1
Flash Point (Closed Cup)	İ	NonIgnitable	>140	>140	>140	>140			
· · · · · · · · · · · · · · · · · · ·						•			

- Laboratory analytical results are reported in mg/L (milligrams per liter).
 Bold values exceed laboratory practical quantitation limits (PQLs).

- 2. Bold values exceed laboratory practical quantitation limits (PQLs).

 3. Shaded value exceeds screening criteria.

 4. "<" = Not detected above reported PQL.

 5. --- = Constituent was not analyzed.

 8. **data presented for 1,1,1-richlorochane.

 7. ^*data reported by two different laboratories (Katabdin/ChemServe).

- 8. B data reported by Alpha Analytical.
- Catar reported by Anjun Analytical)
 Catar reported by two different laboratories (Katahdin/Alpha Analytical).
 Data reported by ChemServe.

 11. ^= sample was analyzed beyond method holding time.
 22. pH measured in standard pH units.

 POTW = Dover's Publicly Owned Treatment Works.

TABLE 2B

SUMMARY OF LABORATORY ANALYSES - FRAC TANK WITH POTW LOCAL LIMITS AND SCREENING LEVELS - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Local Limit	Combined Water SB-4D and MW-206(I) FRAC TANK	Combined Water SB-4D and MW-206(I) FRAC TANK	Combined Water SB-4D and MW-206(I)
Local Limit			
Local Limit			FRAC TANK
	5/7/2009	6/2/2009	7/7/2009
0.4	0.064	0.054	0.036
* * * * * * * * * * * * * * * * * * * *			<0.004
			< 0.05
			< 0.05
			<0.008
			< 0.0009
			< 0.05
			< 0.05
	< 0.007	< 0.007	< 0.007
4.33	< 0.05	< 0.05	< 0.05
0.363	< 0.02	< 0.02	< 0.02
182	< 0.05	0.05	< 0.05
Screening Level	5/7/2009	6/2/2009	7/7/2009
1.55	<0.010*	<0.002*	<0.002*
4.58	< 0.010	< 0.002	< 0.002
0.43	< 0.010	< 0.002	< 0.002
3.74	< 0.010	0.002	0.003
3.65	< 0.010	< 0.002	< 0.002
0.09	< 0.020	< 0.004	< 0.004
3.54	< 0.010	< 0.002	< 0.002
249	< 0.050	< 0.010	< 0.010
,			< 0.050
			< 0.002
			< 0.002
			0.002
			<0.002
			<0.002
			<0.002 0.021
			<0.002
			< 0.005
			< 0.005
			<0.003
			0.017
			< 0.002
			< 0.002
			< 0.002
			< 0.010
0.003	< 0.002	< 0.002	< 0.002
0.07	0.697 ^A	0.310 ^B	0.340^{B}
0.003			
			<0.04
	<0.04		<0.04
100			
90			
<6.0 or >11.0 >75.0	6.3^	6.3^	6.3^
	20	19	25
847	82	95	99
, ,	5/7/2009	6/2/2009	7/7/2009
	< 0.006	0.006	< 0.006
	< 0.004	< 0.004	< 0.004
	< 0.05	< 0.05	< 0.05
	< 0.002	< 0.002	< 0.002
	1.6	1.9	1.6
	0.02 4.03 3.46 0.806 0.004 1.07 8.55 0.713 4.33 0.363 182 Screening Level 1.55 4.58 0.43 3.74 3.65 0.09 3.54 249 1,176 1.24 0.002 0.06 2.35 0.42 0.007 0.04 1.59 1.05 0.96 0.0002 4.15 3.34 0.53 1.35 0.28 0.71 1.22 1.21 0.003 0.07 0.003 150/1,500 1 2.00 100 90 <6.0 or >11.0 >75.0 791 847	0.02	0.02

Notes:

- Notes:

 1. Laboratory analytical results are reported in mg/L (milligrams per liter).

 2. Bold values exceed laboratory practical quantitation limits (PQLs).

 3. Shaded value exceeds screening criteria.

 4. "<" = Not detected above reported PQL.

 5. --- = Constituent was not analyzed.

 6. * data presented for 1,1,1-trichloroethane.

- 7. A data reported by Alpha Analytical.
- 8. B data reported by ChemServe.
- 9. ^ = sample was analyzed beyond method holding time.
- 10. pH measured in standard pH units.
- 11. POTW = Dover's Publicly Owned Treatment Works.

TABLE 3A SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - MW-2061 - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Constituent	POTW Screening Levels	12-May-08	20-May-08	27-May-08	4-Jun-08	10-Jun-08	17-Jun-08	23-Jul-08	29-Jul-08	5-Aug-08	13-Aug-08	19-Aug-08	2-Sep-08	9-Sep-08	16-Sep-08	23-Sep-08	30-Sep-08	7-Oct-08	14-Oct-08	21-Oct-08	27-Oct-08	4-Nov-08	11-Nov-08
benzene	N/A	29	37	19	20	22	56	22	21	19	23	28	27	26	23	23	23	45	26	23	25	25	19
ethylbenzene	1,590	23	33	21	21	23	53	23	24	21	26	26	28	28	26	27	27	41	25	25	26	25	19
toluene	1,350	4	<10	2	3	<10	<10	3	3	2	3	3	3	3	3	3	3	<10	3	2	3	3	2
xylenes (total)	N/A	63	77	45	47	50	122	52	53	48	59	67	72	72	61	67	65	108	67	64	68	67	50
PCE	530	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
TCE	710	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
acetone	1,176,000	<50	<250	<50	<50	<250	<250	<50	<50	<50	<50	<50	<50	<50	< 50	<50	<50	<250	< 50	< 50	<50	< 50	<50
tetrahydrofuran	N/A	2,600	2,700	1,500	3,600	1,700	4,200	3,100	2,400	2,100	1,700	1,900	2,200	2,000	1,900	1,800	1,200	1,500	2,900	2,500	2,200	2,100	2,200
2-butanone (MEK)	249,000	<10	<50	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
MIBK	N/A	<10	< 50	<10	<10	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 50	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<25	<5	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
1,1,1-TCA	1.550**	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1-DCA	4,580	3	<10	2	<2	<10	<10	<2	2	<2	<2	2	2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
bromomethane	2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloromethane	7	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloroform	420	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
bromoform	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
styrene	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloroethane	N/A	3	<10	<2	<2	<10	<10	<2	<2	<2	<2	2	2	2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chlorobenzene	2,350	3	<10	3	3	<10	<10	3	3	2	3	3	4	3	3	3	3	<10	4	3	3	3	2
1,2-dichloropropane	3,650	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	< 50	<10	<10	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 50	<10	<10	<10	<10	<10

NOTES:

- 1. Laboratory analytical results are reported in micrograms per liter (ug/L).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
- MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- PCE = Tetrachloroethene; TCE = Trichloroethene.

 3. N/A = Not Applicable.
- Bold values exceed laboratory practical quantitation limits (PQLs).
- 5. "<" = Not detected above reported PQL.
- 6. * indicates Screening Level for trans-1,2-dichloroethylene.
- 7. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 8. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 3B SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - MW-2061 - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Analyte	POTW Screening Levels	7-May-09	12-May-09	19-May-09	26-May-09	2-Jun-09	9-Jun-09	16-Jun-09	25-Jun-09	30-Jun-09	7-Jul-09	14-Jul-09	20-Jul-09	28-Jul-09
benzene	N/A	29	31	28	31	25	28	27	25	26	22	24	26	26
ethylbenzene	1,590	20	23	19	20	22	22	21	20	22	20	25	26	27
toluene	1,350	<10	<10	2	2	2	3	2	2	3	2	3	3	3
xylenes (total)	N/A	50	58	46	51	50	56	54	51	53	50	67	71	74
PCE	530	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	<250	<250	<50	<50	< 50	< 50	<50	< 50	<50	< 50	<50	<50	< 50
tetrahydrofuran	N/A	1,800	2,100	1,800	2,000	2,500	2,000	1,800	1,700	1,900	1,700	1,900	1,600	2,000
2-butanone	249,000	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	2	<2	<2	<2	<2
chlorobenzene	2,350	<10	<10	3	3	3	3	3	3	3	3	3	3	3
1,2-dichloropropane	3,650	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- PCE = Tetrachloroethene; TCE = Trichloroethene.
- 3. N/A = Not Applicable.
- 4. "<" = Not detected above reported PQL.
- 5. * indicates Screening Level for trans-1,2-dichloroethylene.
- 6. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 7. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 4A SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - SB-4D - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

	POTW																				
Constituent	Screening	12-May-08	25-Jun-08	1-Jul-08	8-Jul-08	15-Jul-08	5-Aug-08	13-Aug-08	19-Aug-08	2-Sep-08	9-Sep-08	16-Sep-08	23-Sep-08	30-Sep-08	7-Oct-08	14-Oct-08	21-Oct-08	27-Oct-08	4-Nov-08	11-Nov-08	18-Nov-08
	Levels																				
benzene	N/A	35	34	31	35	31	36	32	31	31	30	30	32	30	37	34	29	29	29	19	25
ethylbenzene	1,590	30	22	25	29	25	28	25	19	17	3	8	12	14	11	14	14	19	23	<2	15
toluene	1,350	89	70	74	82	80	50	76	73	69	70	70	55	64	61	58	57	59	67	32	51
xylenes (total)	N/A	92	97	114	130	116	108	118	107	107	118	115	112	114	105	98	109	112	123	78	92
PCE	530	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	56	52	66	<250	51	<50	<50	<50	<50	<50	<50	<50	< 50	< 50	< 50	<50	<50	< 50	<50	< 50
tetrahydrofuran	N/A	3,100	1,900	1,900	1,700	1,300	1,800	2,000	1,200	1,400	1,500	1,700	1,400	3,100	2,200	1,700	1,100	1,700	1,500	1,300	1,500
2-butanone (MEK)	249,000	<10	<10	<10	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	15	<10	<10	< 50	<10	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	9	7	6	<10	6	9	6	6	6	6	6	6	6	6	<2	<2	5	6	4	4
chlorobenzene	2,350	<2	<2	2	<10	2	<2	2	2	3	2	2	2	2	2	2	2	3	2	<2	<2
1,2-dichloropropane	3,650	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	<10	<10	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

- 1. Laboratory analytical results are reported in micrograms per liter(ug/L).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Trichloroethene.$
- 3. N/A = Not Applicable.
- 4. Bold values exceed laboratory practical quantitation limits (PQLs).
- "<" = Not detected above reported PQL.
 * indicates Screening Level for trans-1,2-dichloroethylene.
- 7. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 8. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 4B SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - SB-4D - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Analyte	POTW Screening Levels	7-May-09	12-May-09	19-May-09	•	2-Jun-09	9-Jun-09	16-Jun-09	25-Jun-09	30-Jun-09	7-Jul-09	14-Jul-09	20-Jul-09	28-Jul-09
benzene	N/A	21	35	37	37	33	35	33	34	33	29	34	38	34
ethylbenzene	1,590	23	24	22	23	20	23	26	20	25	27	24	25	29
toluene	1,350	36	38	50	46	46	48	47	41	40	40	39	37	41
xylenes (total)	N/A	118	136	122	119	136	145	134	147	136	137	157	167	158
PCE	530	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	<50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	57	< 50
tetrahydrofuran	N/A	1,500	1,600	1,400	1,400	1,500	1,700	2,900	1,700	2,000	1,500	1,600	2,500	2,700
2-butanone	249,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	<2	<2	5	5	5	5	<2	7	6	6	7	7	6
chlorobenzene	2,350	3	3	3	2	3	3	3	3	2	3	3	3	3
1,2-dichloropropane	3,650	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;

PCE = Tetrachloroethene; TCE = Trichloroethene.

- 3. N/A = Not Applicable.
- 4. "<" = Not detected above reported PQL.
- 5. * indicates Screening Level for trans-1,2-dichloroethylene.
- 6. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 7. *** indicates Screening Level for total 1,3-dichloropropene.

September 14, 2009

GeoInsight Project 2009-009:Table 4A and 4B - Summary of Laboratory Analyses SB-4D:TABLE 4B

TABLE 5A MASS REMOVAL CALCULATIONS - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

_	Const	ituents					Constituent '	Weekly Totals							
Date	Benzene (ug/L)	Tetrahydrofuran (ug/L)	Well Pumping	Approximate Pumping Rate (gpm)	Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)							
			Pilot T	est Period											
04/18/08	22	3,000	Frac Tank	NA	15,441	58,451	1.29E-03	1.75E-01							
05/05/08	ND(10)*	1,800	Frac Tank	NA	15,164	57,402	2.87E-04	1.03E-01							
05/12/08	29	2,600	MW-206(I)	0.88	5,415	20,498	5.94E-04	5.33E-02							
05/20/08	37	2,700	MW-206(I)	0.75	6,606	25,006	9.25E-04	6.75E-02							
05/27/08	19	1,500	MW-206(I)	0.50	6,966	26,369	5.01E-04	3.96E-02							
06/04/08	20	3,600	MW-206(I)	0.65	6,750	25,552	5.11E-04	9.20E-02							
6/10 & 6/17/2008	39**	2,950**	MW-206(I)	0.73	4,248	16,080	6.27E-04	4.74E-02							
	10 & 6/17/2008 39** 2,950** MW-206(1) 0.7/3 4,248 16,080 6.2/E-04 4.74E Current Reporting Period (6/17/2008 - 11/25/2008)														
Well ID	Average Benzene concentration (ug/L)	Average Tetrahydrofuran Concentration (ug/L)	Well Pumping	Average Pumping Rate per Well (gpm)	Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)							
MW-206(I)	25	2,106	NA	0.64	86,827	328,677	8.22E-03	6.92E-01							
SB-4D	31	1,679	NA	0.93	126,171	477,608	1.48E-02	8.02E-01							
TOTAL TO DATE:					273,588	1,035,643	2.78E-02	2.07E+00							
SUMMARY															
TOTAL ESTIMAT	ED MASS REMOV	ED IN 2008:					kg	lbs							
Benzene							0.028	0.06							
Tetrahydrofuran							2.073	4.57							

NOTES:

- 1. * = constituent not detected above detection limit; mass removal calculated using half of the detection limit.
- 2. ** = average concentrations calculated from two influent samples collected during pumping period.
- 3. Frac Tank = indicates water sample was collected from fractionation tank (i.e., water storage tank); SB-4D and MW-206I combined effluent.
- 4. NA = not applicable.
- 5. ug/L = micrograms per liter.
- 6. gpm = gallons per minute.
- 7. kg = kilograms.
- 8. lbs = pounds.
- 9. "Gallons Pumped" estimated based upon volume monitoring of frac tank and/or recorded water transfer volume.

September 14, 2009

GeoInsight, Inc. Project: 2009-009:Table 5A and 5B - Mass Removal Calculations

TABLE 5B

MASS REMOVAL CALCULATIONS - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

	Const	ituents						Constituent I	Monthly Totals
Date	Benzene (ug/L)	Tetrahydrofuran (ug/L)	Average Benzene (ug/L)	Average Tetrahydrofuran (ug/L)	Wells Pumping	Approximate Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)
		•		Current Reporting	g Period				
05/07/09	27	1,600							
06/02/09	22	1,900	23	1,700	MW-206(I)/SB-4D	123,168	466,242	1.06E-02	7.93E-01
07/07/09	19	1,600	23 1,700 M						
TOTAL ESTIMA	TED MASS REMOV	ED DURING CURI	RENT PUMPING	SEASON (April 29	through July 28, 20	09):		kg	lbs
Benzene								0.011	0.02
Tetrahydrofuran								0.793	1.75

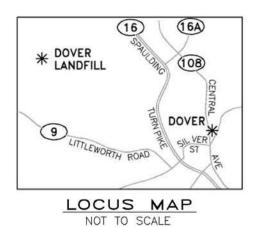
NOTES:

- 1. Mass removal calculated using the averages values of Frac Tank samples collected during monthly effluent monitoring.
- 2. Frac Tank = indicates water sample was collected from fractionation tank (i.e., water storage tank); SB-4D and MW-206I combined influent.
- 3. Bold values exceed laboratory practical quantitation limits.
- 4. ug/L = micrograms per liter.
- 5. kg = kilograms.
- 6. lbs = pounds.
- 7. "Gallons Pumped" estimated based upon volume monitoring of frac tank and/or recorded water transfer volume; reported quantity transfer volumes following previous sample date up to and including current sample date.



FIGURES

SITE AREA PLAN

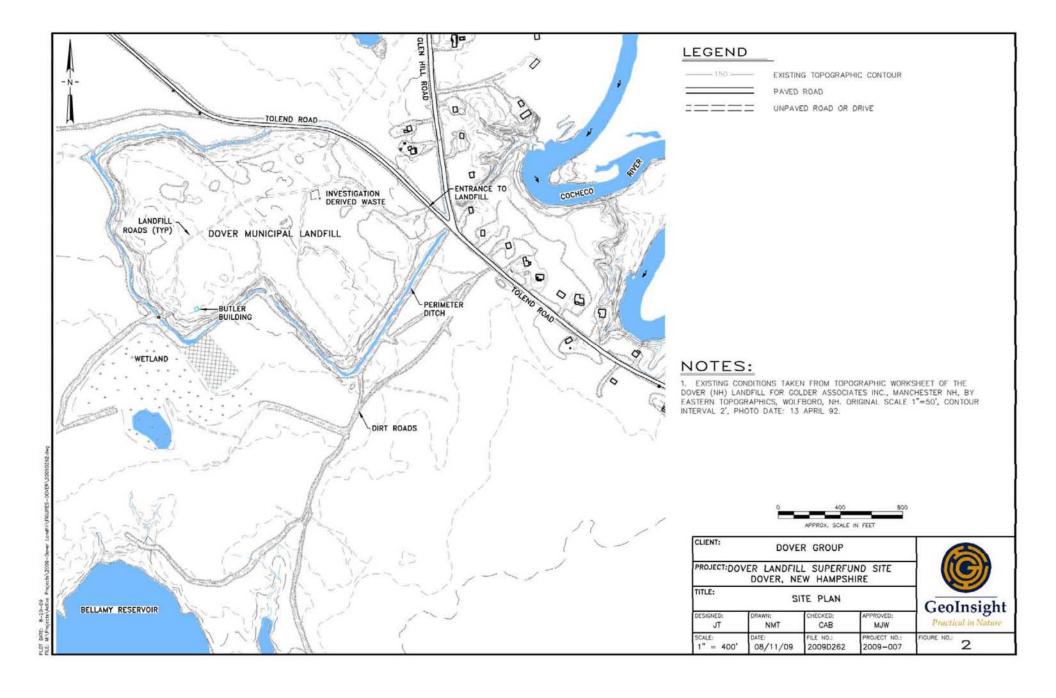


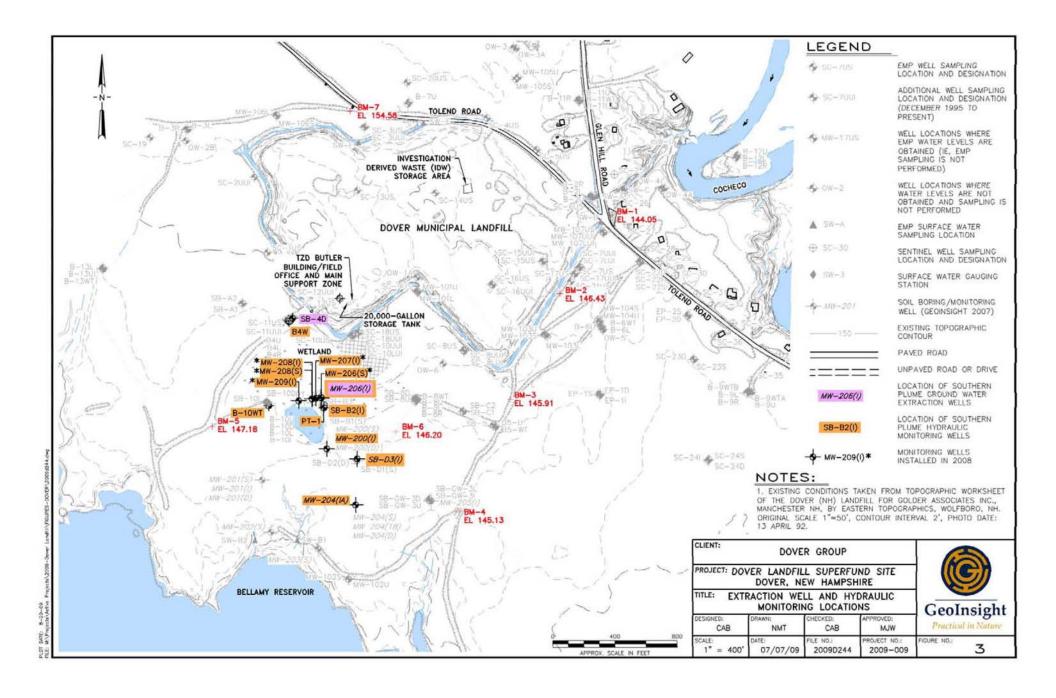
1/2 MILE 1 MILE APPROX. SCALE IN FEET

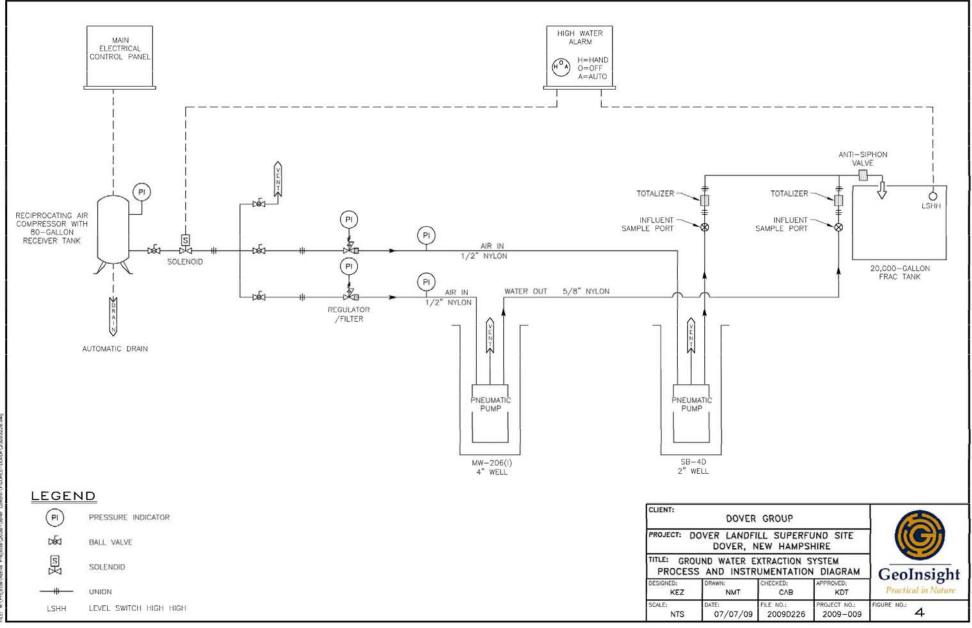
CONTOUR INTERVAL 20 FEET

REFERENCE: TAKEN FROM USGS MAP "DOVER WEST, NH NW/4 15' QUADRANGLE, REVISED 1993.

CLIENT:	DOVE	ER GROUP		
PROJECT: D		FILL SUPERF	Transfer State Transfer	
TITLE:	SITI	E LOCUS		GeoInsight
DESIGNED: CAB	DRAWN: NMT	CHECKED: CAB	APPROVED: MJW	Practical in Nature
SCALE: AS NOTED	DATE: 6/8/07	FILE NO.: 2009-LOCUS	PROJECT NO.: 2009-007	FIGURE NO.:







PLOT DATE: 8-29-09



APPENDIX A PHOTOGRAPHS

APPENDIX A SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE



1. GWE system control panel (top right), main electrical control panel (bottom center).



2. 80-gallon reciprocating air compressor inside Butler Building.

APPENDIX A SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE



3. Air line manifold, air filter/regulators, and compressor auto drain.



4. Southeast view of fractionation tank with new manifold and siphon valve on top of tank.



APPENDIX B PERFORMANCE MONITORING WELL VOC TABLES

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-BI

DOWNGRADIENT WELL SCREENED INTERVAL - 5 - 15 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06*	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09
benzene	5	0.3	0.6	0.4	<1	0.5(J)	<1	<1	<1	0.6(J)	0.7(J)	0.5(J)	0.8(J)	<1	3	0.6(J)	<1	<1	0.5(J)	<1	0.6(J)	0.7(J)	0.7(J)	<10	1	0.9(J)	1	0.9(J)	1	1	1	1	2	2	2
ethylbenzene		0.7	0.8	0.9	0.6(J)	0.7(J)	0.5(J)	<1	0.6(J)	0.6(J)	0.6(J)	<1	1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	0.1(J)	0.2(J)	<10	<1	0.2(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	0.5	0.8	0.4	0.5(J)	<1	0.5(J)	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	0.5	<1	<1	<1	<1	<1	0.9(J)	<1	<1	2	<1	0.9(J)	<1	<1	<1	<1	<1	<1	0.4(J)	<1	<10	<1	<3	<3	<3	3	-3	3	<3	<3	1(J)	0.3(J)
1																										-		-	-	-	-	-			
PCE	5	< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TCE	5	< 0.3	0.4	0.3	<1	0.4(J)	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	7	8	6	4(J)	5	4	3	3	2	3	2	2.5(J)	2	<1	2	<1	1	1	1	2	<1	1	1(J)	<1	0.9(J)	1(J)	0.8(J)	<1	1	0.7(J)	0.9(J)	0.8(J)	1(J)	0.7(J)
vinyl chloride	2	2	2	2	1(J)	<1	1	1	0.7(J)	0.7(J)	1	1(J)	1	<1	<1	0.9(J)	0.7(J)	1(J)	0.5(J)	0.9(J)	2	0.8(J)	<1	1(J)	<1	1(J)	1	0.7(J)	1	1(J)	0.9(J)	0.9(J)	1	0.8(J)	0.7(J)
acetone	700		<5	<5	5(R)	2(J)	12	<5	<5	<5	<5	8	<5	<5	7	<5	<5	<5	<5	<5	13	<5	<5	<10	<1	4(J)	<5	<5	<5	<5	<5	3(JB)	<5	<5	2(J)
tetrahydrofuran	154	<1	<5	11	5(R)	3(R)	<5	<5	<5	<5	<5	<5	6	6	<5	3(J)	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	4(J)	<5	5(J)
2-butanone	200		<5	<5	5(R)	5(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	5(J)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.8(JB)	0.6(J)	1(B)	0.8(J)	3(B)	3(B)	5(B)	1(B)	7(B)	0.8(JB)	0.7(J)	<1	<1	<1	<1	<1	<1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	0.5(JB)	0.4(JB)
1	-						()	(.)	-(-/																						-				
1,1,1,-TCA		<0.5	< 0.5	<0.5	<1 2(T)	<1 2	<1	<1	<1	<1	<1	<1 1(T)	<1	<1	<1	<1 0.7(T)	<1	<1 0 < (T)	<1 0.5(T)	<1 0.5(T)	<1	<1 0.7(T)	<1	<10	<1	<1 0.0(T)	<1	<1 0.5(T)	<1	<1 0.5(T)	<1 0.600	<1 0 < (T)	<1 0.0(T)	<1 0.0(T)	<1 0.0(T)
1,1-DCA			0	4	3(J)		2	2	1	1	1	1(J)	1	<1	<1	0.7(J)	<1	0.6(J)	0.5(J)	0.5(J)	<1	0.7(J)	<1	<10	<1	0.8(J)	<1	0.5(J)	<1	0.5(J)	0.6(J)	U.6(J)	0.8(J)	0.9(J)	0.8(J)
1,1-DCE	7	<1.3	<1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.8(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	0.8	0.7	< 0.7	<1	<1	2	<1	<1	0.5(J)	<1	0.6(J)	0.6(J)	<1	<1	0.8(J)	<1	0.9(J)	1(J)	<1	0.7(J)	<1	0.6(J)	<10	<1	<1	0.8(J)	0.8(J)	<1	1	1	1(J)	0.9(J)	1(J)	1
bromomethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
chloromethane		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.7(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.3(J)	<2
chloroform		< 0.7	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	0.4	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
				10					0.0/7															-10	-1	- 4	- 4	-1	<1	-1	-1	-1	- 4	<1	<1
carbon disulfide		-0.4	<5	10	<1	<1	<1	<1	0.9(J)	<1	<1	<1	<1	<1	<1	<1 <1	<1	<1 <1	<1 <1	<1	-8 -<1	<1 <1	<1	<10	<1	<1	<1 <1	<1 <1		<1	<1	<1	<1 <1		<1
styrene	14.000	<0.4	< 0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1						<1	<10	<1	<1			<1	<1	<1	<1	<1	<1	
chloroethane	14,000		1	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
chlorobenzene		< 0.2	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		0.4	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	<5	<5	< <u></u> 5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	< <u>5</u>	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10																<1.98	<2.53	3.3(B)	<2.53	< 2.08	<2	<1.8	4.3(B)	2.4(B)	<3	<2.81	<3.45	<8	< 3.09	2.9(B)	2.9(B)	<1.7	2.5(B)	1.8(B)
arsenic (total)				<2.40	<2.60	<2	<3.80	4.80	5.20(B)	2.60(B)	<3.00	<2.54	<1.81	2.60(B)	< 2.07	<2.19	<1.98	<2.53	6(B)	3.0(B)	<2.08	2.2(B)	3.1(B)	1.5(B)	1.4(B)	<3	<2.81	<3.45	<8	< 3.09	4.0(B)	3.3(B)	<1.7	2.6(B)	2.2(B)
calcium		38,400	37,600	26,600	30,000	28,200	28,100	27,100	40,000	32,000	32,400	31,200	30,200	30,000	27,300	27,300																			
iron (dissolved)																	42,500	52,900	49,500	48,000	48,600	39,200	50,000	37,600	43,400	45,600	46,800	40,000	52,900	44,400	53,700	47,100	44,800	48,600	59,900
iron (total)		148,000	170,000	70,700	74,700	71,300	69,000	62,300	82,600	74,000	75,200	72,800	71,200	70,900	65,900	64,300	42,800	53,800	49,100	49,700	48,500	47,200	48,700	17,200	42,800	45,500	47,100	42,800	53,300	45,500	52,800	45,700	45,500	50,000	60,500
magnesium		23,700	29,800	7,470	8,410	7,910	7,800	7,430	13,600	8,540	9,080	8,590	8,420	8,040	7,590	7,560																			
manganese (dissolved)																	603	796	768	718	714	601	755	602	695	705	706	601	799	667	860	735	699	733	
manganese (total)		2,000	2,170	804	890	856	810	803	1,190	964	962	1,020	959	957	892	891	599	762	748	743	720	714	723	281	681	698	707	627	799	686	843	694	709	756	
potassium		18,100	22,700	1,710(B)	<1,680	1,830	1,640(B)	2,460(B)	3,610(B)	2,200	2,300	2,440(B)	1,950	2,580	2,130(B)	2,570(B)																			
sodium		17,100	17,000	17,400	21,000	23,700	24,200	30,200	115,000	34,600	37,500	42,400	41,800	52,100	47,200	52,400																			
pH (SU)				6.06	6.24	5.88	5.98	6.52	6.01	6.85	6.17	6.11	6.28	6.16	6.06	6.34	6.06	6.45	6.08	6.18	6.18	6.08	5.47	6.23	5.71	6.01	6.05	6.16	5.65	6.42	6.11	6.22	6.17	5.98	6.03
SC (mS/cm)				0.564	0.591	0.627	0.615	0.370	0.600	0.753	0.670	0.789	0.736	0.776	0.654	0.434	0.743	0.703	0.628	0.594	0.608	0.740	0.527	0.481	0.587	0.600	0.558	0.578	0.592	0.641	0.61	0.401	0.496	0.599	0.703
Turb (NTU)				4	0	15	7	0	4	-10	0	0	0	0	0	3	3	23	9.60	3	2.10	6.55	0.40	11	3.20	3.61		15	4.81	4.35	0.14	2.19	0.00	2.10	1.68
DO (mg/l)				0.40	0.04	0.05	0.05	3.35	0.43	0.78	0.11	0.16	0.41	0.23	0.08	0	0.58	0.16	0.37	1.81	0.38	0.88	0.50	0.44	0.31	0.24	0.93	0.61	0.24	0.42	0.23	0.23	0.24	0.26	0.18
Eh (mv)				-74	-50	-92.6	-88	-244	-77.1	-51	-17	-28.4	-31	1	-27	-42	33.8	-32	-33	-49.4	-8	-162	-13.7	-14.6	-26.2	-84.7	-24.8	-46.2	-6.3	-84.3	-54.5	-171.3	-28.4	-25.6	-17
Temp (°C)				9.8	7	11	7.6	8.7	9.1	8.8	7.3	8	6.8	11	8.3	10	13	8.4	11	10	8.9	10	8.6	11	7.6	8.8	7.61	11.19	11.24	10.26	8.53	10.96	9.41	11.51	13.84
Water Level Elevation	149.64	145.30	141.92	142.92	145.37	144.38	145,27	145.45	144.45	145.49	145,43	145.32	145.32	144.69	145.13	145.41	145.22	145.28	145.65	142.19	145.24	145.22	145.44	145.42	145,48	145.53	145.42	147.07	145.49	145.54	145.49	144.78	145 40	145.46	144.26

[&]quot;" denotes the ground water sample collected for well SB-B1 was incorrectly identified in the field and on the laboratory analytical report as SB-B3.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-B2

DOWNGRADIENT WELL SCREENED INTERVAL - 34 - 44 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06*	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	Jul-09
benzene	5	6	6	6	8(J)	8(J)	<25	8	11	11	13	15	14	14	33	19	19	20	21	20	26	23	23	26	28	22	24	22	21	25	25	20	27	31	22	25
ethylbenzene		6	6	7	8(J)	9(J)	<25	9	12	13	16	19	19	18	29	24	25	29	22	27	28	25(B)	25	28	<25	24	26	24	22	25	25	10	21	25	16	13
toluene	1,000	2	2	2	<17	<10	<25	<8	4	4	5(B)	6	5	5	<10	6	6	6	6	6	7	6	6	7(J)	<25	5	5	5	5	5	5	3	4	5	4	3
xylene		8	8	10	<17	13	<25	15	21	23	28	39	37	39	<10	55	60	76	65	72	83	73(B)	77	83	<25	70	80	70	70	82	81	30	59	76	55	33
1	_																							-10			4000	-								
PCE	5	< 0.4	< 0.4	< 0.4	<17	<10	<25	<8	<1	<1	0.7(J)	<1	0.5(J)	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	4(B)	⊲5	<1	<1	<1	<1	<1	<1	<1	<1
TCE	3	< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	0.5(J)	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	⊲5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	1.3	0.9	1.2	<17	<10	<25	<8	1.6(J)	1	2	1.8(J)	2(J)	0.7(J)	<10	1.9(J)	2	1.8	1	1(J)	1	1	2	<10	<25	1	2	<5	1.8	2	1.9	1.9(J)	2	2	2(J)	0.8(J)
vinyl chloride	2	4	3	4	<17	<10	<25	<8	2	4	4	3	3	<1	<10	3	3	2	2	2	4	3	3	3(J)	<25	2	2	<5	<1	2	0.9(J)	<1	0.7(J)	0.9(J)	<2	0.5(J)
acetone	700		<5	3(J)	83(R)	50(R)	<130	<42	9	5	<5	17	9	7(B)	35(J)	4(J)	4(J)	<5	6(B)	9	38	28	8	<10	<25	17	27	<25	7	29	23	15	14	16	24	7
tetrahydrofuran	154	240	310(E)	360	280(J)	430(J)	510	590	700(E)	750	<5	580	820(E)	1,100	940	1,900	1500(E)	1,400	1,900	1,500	2,400	2,100	1,200	1,700	2,100	2,100	2,100	1,500(B)	680	2,000	1,900	2,100	2,000	1,500	1,600	1,100
2-butanone	200		<5	<5	83(R)	50(R)	<130	<42	<5	<5	<5	<5	7	5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<10	<25	<5	<5	<25	<5	<5	<5	<5	<5	<5	6	<5
4-methyl 2-pentanone	350		11	13(B)	83(J)	< 50	<130	5(J)	3(J)	2(J)	<5	3(J)	4(J)	<5	< 50	3(J)	<5	<5	<5	<5	4(J)	<5	<5	<10	<25	3(J)	6	<25	<5	<5	<5	3(J)	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<48	<10	44(B)	<8	2(B)	2	3(B)	5(B)	6(B)	2(B)	72(B)	2(B)	2	1(B)	0.9(JB)	2(B)	<1	0.7(J)	13(B)	2(J)	<25	<1	<2	9	<5	17(JB)	0.8(J)	1(J)	1(J)	2(JB)	1(JB)	1(JB)
1,1,1-TCA		< 0.5	< 0.5	< 0.5	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		0.9	0.8	0.9	<17	<10	<25	<8	2	2	2	2	2	<1	<10	2	2	2	2	2	3	3	3	3(J)	<25	2	3	2(J)	2	3	2	2	3	3	2	2
1,1-DCE	7	<1.3	<1.3	<1.3	<17	<10	<25	<8	<1	<1	<1	<1	0.6(J)	<1	<10	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	1	0.8	0.7	<17	<10	<25	<8	<1	1	<1	1	1	1	<10	2	1	2	2	2	2	2	<1	<10	<25	1	<1	2(J)	1(J)	2	2	1	<1	1	0.9(J)	0.9(J)
bromomethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2
chloromethane		< 0.5	< 0.5	< 0.5	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	0.5(J)	0.6(J)	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2
chloroform		< 0.7	< 0.7	< 0.7	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	2(J)	<17	<10	<25	<8	<1	<1	<1	<1	Z I	~1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	<0.4	<0.4	<17	<10	<25	<8	<1	0.6(J)	<1	<1	1	-d	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	- 21	<1	<1	<1
chloroethane	14,000	<0.4	1	1	<17	<10	<25	<8	,	2	<1	,	,	2	<10	4	3	2	,	<1	4	3	<1	3(T)	<25	,	,	- 5	,	3	,	,	3	4	2(J)	3
chlorobenzene		0.8	0.8	0.9	<17	<10	<25	<8	ī	1	<1	2	,	,	<10	,	2	2	,	,	3	<1	1	3(J)	<25	,	3	<5	<1	3	3	,	3	3	2	2
1,2-dichloropropane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	< 0.2	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		<0.4	<0.4	<0.4	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	<0.4	<0.4	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	1	<5	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	<83	<50	<130	<42	<5	16	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<10	<25	<5	<5	<25	<5	<5	<5	<5	<5	⊲5	<5	<5
arsenic (dissolved)	10																11.7	11.6	13.4	13.2	10.8	13.4	12.2	14.3	15.5	16.8	15.7	3.7(B)	16.8	14.7	17.4	16.5	14.4	14.6	16.5	16.6
arsenic (total)			8.9(B)	6.8(B)	< 5.20	7.40	10.6	8.5(B)	2	3.5(B)	9	10.6	9.40	12	< 2.08	10	10.9	11.9	16.6	12.9	11.4	14.2	14.3	8.3(B)	13.7	17.8	14.5	14.9	17.9	16.5	17.3	16.4	15.5	17.0	17.1	18.0
calcium		56,400	50,300	61,600	71,300	66,400	73,400	66,100	28,200	54,200	83,400	87,400	82,600	92,500	27,400	94,800																				
iron (dissolved)																	170,000	166,000	162,000	159,000	153,000	158,000	146,000	132,000	121,000	136,000	126,000	34,800	109,000	106,000	103,000	101,000	63,600	72,200	62,200	
iron (total)		143,000	107,000	130,000	138,000	131,000	160,000	126,000	69,900	160,000	170,000	170,000	155,000	171,000	66,100	172,000	167,000	170,000	154,000	159,000	159,000	161,000	145,000	87,300	113,000	135,000	124,000	122,000	111,000	109,000	104,000	108,000	62,000	75,600	63,400	
magnesium		24,100	17,500	19,200	22,500	21,000	24,300	22,200	7,680	4,020	30,700	32,100	32,000	34,700	7,620	37,400																				
manganese (dissolved)																	1,560	1,540	1,400	1,360	1,210	1,210	1,030	920	814	803	693	662	550	510	453	447	258	276		
manganese (total)		2,690	2,090	2,270	2,520	2,300	2,290	1,980	883	98.3	2,230	2,220	1,990	2,020	889	1,760	1,520	1,550	1,340	1,360	1,250	1,220	1,020	624	758	790	690	620	562	521	463	484	254	290		
potassium		11,400(E)	4,600(B)	3,830	3,960(B)	4,350	5,020	5,390	1,840(B)	12,100	6,400	7,040	6,260		2,100(B)	8,400																				
sodium		91,700	87,400	118,000	148,000	142,000	183,000	187,000	28,600	238,000	288,000	299,000	327,000	337,000	47,600	370,000																				
pH (SU)				6.05	6.21	6.06	6	6.45	5.85	6.62	6.07	6.07	6.13	6.13	5.94	6.07	5.87	6.10	5.92	5.96	5.97	5.98	5.38	6.07	5.48	5.85	5.86	6	5.62	6.26	5.99	5.93	6.18	5.98	5.99	6.08
SC (mS/cm)				1.33	1.80	1.92	2.11	2.03	2.33	2.70	2.62	2.81	2.85	3.12	2.99	3.50	3.27	3.33	3.55	3.37	3.62	4.42	3.26	3.07	3.74	3.83	3.65	3.79	3.802	4.163	3.916	4.978	3.924	3.867	4.24	4.11
Turb (NTU)				7	6	45	3	0	22	2	5	0	1	0	0	63	5	20	95	4.40	11.8	8.19	1.90	7	5	20.3	4.97	5.42	3.3	9.42	0.85	1.48	4.89	0.14	5.82	
DO (mg/l)				0.20	0.04	0.01	0.05	2.88	0.27	0.51	0.36	0.16	0.82	0.21	0.47	0	0.70	0	0.75	3.26	0.91	3.49	0.97	0.45	0.62	0.4	0.93	0.9	0.4	1.59	0.39	0.3	0.96	0.57	0.20	0.14
Eh (mv)				-64	-39	-40	-85	-254	-56.8	-48	-15	-32.5	-35	-2	-24	-51	42.3	-34	-34	-60.1	0.91	-153	-28.2	-15	3.60	-85.5	-18.5	-40.2	-13.5	-91.5	-70.2	-189.2	-54.1	-30.2	19	-4
Temp (°C)				9.4	8.6	9.4	9.3	7.8	10	8.1	8.9	7.7	8.5	9.4	10	9	10	8.1	10	9	10	9.1	11	9.2	9.7	7.4	9.1	10.05	15.11	10.18	9.86	11.93	10.88	11.92	16.58	13.02
	149.33	147.28	144.86	145.11	147.26	146.29	147.01	147.59	146.43	148.16	147.42	146.93	147.22	146.55	146.55	147.08	146.95	147.04	147.18	144.66	147.00	146,93	147.54	147.28	147.58	147.53	147.66	147.07	148.02	147.43	147.46	146.57	147.33	147.37	146.35	145.47

[&]quot;*" denotes the ground water sample collected for well SB-B2 was incorrectly identified in the field and on the laboratory analytical report as SB-B1.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-B3

DOWNGRADIENT WELL SCREENED INTERVAL - 47 - 57 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-04	Dec-04	Jun-05	Jun-06*	Oct-06	Jun-07	Oct-07	Apr-09
benzene	5	2	1	1	4.9	4	4	4	5	5	6	4
ethylbenzene		2	1	2	3.3	3	2	3	3	3	4	2
toluene	1,000	0.5	0.4	0.6	<1	<1	<1	0.7(J)	<1	<1	<1	0.6(J)
xylene		1.7	1	3	7.2	6	4	6	6	6	6	2 (J)
PCE	5	< 0.4	< 0.4	0.6	<1	<1	<1	<1	<1	<1	<1	<1
TCE	5	< 0.3	< 0.3	0.8	<1	<1	<1	<1	<1	<1	<1	<1
1.2-DCE	70	<0.4	< 0.4	1	<1	<1	<1	<1	<1	<1	<1	0.3(J)
vinyl chloride	2	0.9	<0.4	1	<1	<1	<1	<1	<1	<1	<1	<2
acetone	700		15	<5	<1	7	<5	<5	<5	5	6	3 (J)
tetrahydrofuran	154	74	360	94	83	82	<5	74	110	140	160	19
2-butanone	200		<5	<5	<1	<5	<5	<5	<5	<5	<5	<5
			<5			<5	<5		<5			
4-methyl 2-pentanone	350			<5	<1			<5		<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	<2	<5	<5	<5	<5	<5
1,1,1,-TCA		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		< 0.3	< 0.3	< 0.3	<1	<1	<1	0.5(J)	<1	<1	<1	0.5(J)
1,1-DCE	7	<1.3	< 0.4	<1.3	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	1	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	0.4 (J)
bromomethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<2
chloromethane		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<2
chloroform		< 0.7	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3		<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	0.4	<0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<2
chlorobenzene		0.2	< 0.2	0.4	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<0.3	<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<0.2	<0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	<0.3	<0.3	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone					<1	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10		39.5		40	42	43	42.8	39	43.9	46.2	51.9
arsenic (total)					41	46	40	42	38	41.9	48	55.1
calcium		38,800	22,200	18,800								
iron (dissolved)					44,000	52,400	51,700	55,700	56,400	62,500	68,200	68,400
iron (total)		76,900	44,800	32,900	44,000	56,000	51,600	56,100	57,100	62,700	70,700	70,100
magnesium		18,400	11,300	8,530								
manganese (dissolved)				842	1,600	1,840	1,940	2,040	1,990	2,100	2,380	
manganese (total)		1,900	1,110		1,700	1,980	1,920	2,060	2,010	2,130	2,450	
potassium		12,700	7,610	4,860(B)					2,010	2,130	2,430	
sodium		30,300	25,000	22,000								
pH (SU)						6.17	6.21	5.65	6.28	6.18	6.38	6.28
SC (mS/cm)						1.176	0.933	0.946	1.269	1.304	0.00962	1.301
Turb (NTU)						1.33	1.88	0.64	1.56	0.39	0.00902	55.4
DO (mg/l)						0.38	0.76	3.01	0.32	0.59	0.3	0.25
Eh (mv)						-99.9	6.8	-20.6	-108.7	-4.8	-188	-67
Temp (°C)						7.67	9.79	14.28	9.87	11.57	10.15	10.17
Water Level Elevation						146.88	147.23	14.28	146.78	146.98	146.05	10.17
water Level Elevation						140.00	147.23	147.03	140./8	140.98	140.03	141.94

[&]quot;*" denotes the ground water sample collected for well SB-B3 was incorrectly identified in the field and on the laboratory report as SB-B2.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-200(S)

SCREENED INTERVAL - 17 - 27 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	2	4
ethylbenzene		0.6 (J)	0.7 (J)
toluene	1,000	<1	0.4 (J)
xylenes (total)		<3	<3
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	0.7 (J)	0.7 (J)
vinyl chloride	2	0.8 (J)	1 (J)
acetone	700	<5	3 (J)
tetrahydrofuran	154	<5	2 (J)
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.5 (JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	1
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	0.9 (J)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		0.4 (J)	0.4 (J)
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	24.3	22.7
arsenic (total)		24.3	23.1
calcium			
iron (dissolved)		84,600	82,800
iron (total)		86,800	83,600
magnesium			
manganese (dissolved)		1,430	
manganese (total)		1,460	
potassium			
sodium			
pH (SU)		6.19	6.25
SC (mS/cm)		0.864	0.995
Turb (NTU)		56.8	73.2
DO (mg/l)		0.08	0.28
ORP (mv)		-17	-46
Temp (°C)		9.65	11.66
Water Level Elevation	NA	143.80	144.12

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- $3. \ \ ICL = Interim \ Cleanup \ Level.$
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- $10. \ \, B = Denotes \ an estimated \ value; constituent \ detected \ at \ a \ concentration \ below \ the \ Practical \ Quantitation \ Limit \ (PQL) \ for \ metals.$
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-200(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Nov-08	Apr-09	Jul-09
benzene	5	4	6	6	6
ethylbenzene		3	5	5	5
toluene	1,000	0.8 (J)	1	1	1
xylenes (total)		2 (J)	4	6	5
Aylenes (total)		2 (0)	•	v	J
PCE	5	<1	<1	<1	<1
TCE	5	<1	<1	<1	<1
cis-1,2-DCE	70	0.5 (J)	<1	0.7 (J)	0.7 (J)
vinyl chloride	2	1 (J)	1	1 (J)	1 (J)
·					
acetone	700	<5	<5	7	3 (J)
tetrahydrofuran	154	5	26	57	58
2-butanone	200	<5	<5	2 (J)	3 (J)
4-methyl 2-pentanone	350	7	<5	<5	<5
methylene chloride	5	0.7 (J)	<5	2 (JB)	<5
1,1,1-TCA		<1	<1	<1	<1
1,1-DCA		<1	<1	0.9 (J)	0.8 (J)
1,1-DCE	7	<1	<1	<1	<1
1,2-DCA	5	0.5 (J)	<1	0.6 (J)	0.6 (J)
bromomethane		<2	<1	<2	<2
chloromethane		<2	<1	<2	<2
chloroform		<1	<1	<1	<1
dibromochloromethane		<1	<1	<1	<1
bromoform		<1	<1	<1	<1
bromororm		<1	<1	<1	<1
carbon disulfide		<1	<1	<1	<1
styrene		<1	<1	<1	<1
chloroethane	14,000	<2	<1	<2	<2
chlorobenzene		0.4 (J)	<1	0.6 (J)	0.5 (J)
1,2-dichloropropane		<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1
2-hexanone		<5	<5	<5	<5
arsenic (dissolved)	10	21.7	16.5	16.1	21.2
arsenic (total)		19.5	16.6	18.2	20.8
calcium					
iron (dissolved)		83,100	93,900	95,800	
iron (total)		80,400	89,500	98,100	
magnesium					
manganese (dissolved)		1,760	1,980	1,900	
manganese (total)		1,720	1,870	1,930	
potassium					
sodium					
pH (SU)		6.22	6.36	6.20	6.20
SC (mS/cm)		0.841	0.945	1.151	1.139
Turb (NTU)		66.2	9.54	35.5	
DO (mg/l)		0.06	0.2	0.13	0.21
ORP (mv)		-85		-70	-1
Temp (°C)		10.42	9.27	10.75	11.73
Water Level Elevation				145.12	144.96

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA WELL MW-200(D) SCREENED INTERVAL - 60 - 70 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	<1	<1
ethylbenzene		<1	<1
toluene	1,000	<1	<1
xylenes (total)		<3	<3
Aylenes (total)		-	
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	<1	<1
vinyl chloride	2	<2	<2
acetone	700	<5	<5
tetrahydrofuran	154	<5	<5
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.6(JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	<1
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	<1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	>5
arsenic (dissolved)	10	89.6	89.4
arsenic (total)		92.8	86.4
calcium			
iron (dissolved)		158	131
iron (total)		1,170	206
magnesium			
manganese (dissolved)		226	
manganese (total)		246	
potassium			
sodium			
pH (SU)		9.51	7.45
SC (mS/cm)		0.169	0.170
Turb (NTU)		88	13.6
DO (mg/l)		0.14	0.06
ORP (mv)		-88	-109
Temp (°C)		10.73	11.01
Water Level Elevation	NA	144.16	144.66

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- $2. \ \ DCE = Dichloroethene; \ DCA = Dichloroethane; \ MEK = Methyl \ Ethyl \ Ketone \ (2-butanone);$

MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;

- PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in my (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-10I

DOWNGRADIENT WELL SCREENED INTERVAL - 30- 40 FEET BGS

constituent (ppb)	ICL	Jun-01	Nov-01	May-02	Dec-02	Jun-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	<1	<1	<1	<1	<1	<10	<1	0.2(J)	<1	0.4(J)	<1	<1	0.7(J)	0.7(J)	1(J)	0.9(J)	1	1(J)
ethylbenzene		<1	<1	<1	0.2(JB)	0.3(J)	<10	<1	1(J)	2	2	3	3	3	4	6	6	7	6
toluene	1,000	<1	<1	<1	<1	3	<10	<1	0.5(J)	<1	0.6(J)	0.8(J)	0.8(J)	1	1 (J)	1	1	2	1
xylene		<1	<1	<1	0.5(J)	6	<10	2	3	3	3	2(J)	<3	2(J)	2(J)	3 (J)	2(J)	4	3 (J)
PCE	5	-1	-1	-1	.1	.1	-10	-1	-1	-4	-4		-1	-4			-4	-1	-1
		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1 0.4(T)	<1	<1	<1	<1	<1 0.5(T)	<1 0.4(T)	<1	<1
TCE	5	<1	<1	<1	<1	<1	<10	<1	<1	<1	0.4(J)	<1	<1 4	<1 5	<1	0.5(J)	0.4(J)	0.6(J)	0.5(J)
1,2-DCE	70	0.6(J)	<1	<1	<1	<1	<10	1	2	2	3	4			4	7	6	7	8
vinyl chloride	2	<1	<1	<1	<1	<1	<10	<1	0.7 (J)	<1	1	<1	2	4	4	5	5	4	6
acetone	700	<5	<5	<5	<5	<5	<10	<1	2 (J)	<5	<5	<5	<5	7	<5	4 (J)	3 (J)	3 (J)	4(J)
tetrahydrofuran	154	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	2 (J)	2(J)	8	<5
2-butanone	200	<5	<5	7	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350	<5	11	17	<5	19	4(J)	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	0.7(JB)	<1	<1	5(B)	<10	<1	<1	<2	<2	<5	<5	<5	<5	0.4(J)	<5	1(JB)	1(JB)
1,1,1,-TCA		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		<1	<1	<1	0.3(J)	0.6(J)	<10	1	1	1	2	2	2	3	4	4	4	5	6
1,1-DCE	7	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<1	<1	<1	<1	<1	<10	<1	0.2(J)	<1	<1	<1	0.7(J)	1	0.8(J)	1	1(J)	1	1
bromomethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		<1	0.6(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloroform		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10	12.4(B)	14.9	12.4	14	14.6	11.4	15.4	16.8	15.2	12	13.8	14.6	13.6	13.2	16.4	14.0	14.1	
arsenic (total)		31.8(B)	13.4	13.2	16.6	15.3	15.6	14.5	14.4	17.1	11.4	11.7	15.6	13.8	13.6	17.1	15.3	16.4	
calcium																			
iron (dissolved)		3,840	10,400	8,650	10,800	10,900	10,300	11,600	12,700	14,500	13,900	16,600	17,200	21,800	21,300	24,800	25,700	27,000	
iron (total)		55,000	15,700	9,980	11,900	11,300	9,780	11,900	14,100	14,700	13,400	16,400	16,900	21,100	21,400	25,200	26,100	26,600	
magnesium																			
manganese (dissolved)		540	318	305	290	282	277	305	322	352	339	418	443	542	565	642	649	653	
manganese (total)		1,240	374	286	298	277	260	314	340	355	322	409	438	520	555	643	651	645	
potassium																			
sodium						5,500	5,500												
pH (SU)		6.29	6.77	6.82	6.60	6.77	6.91	6.61	6.61	6.76	6.82	6.63	6.54	6.49	7.06	6.57	6.44	6.95	6.64
SC (mS/cm)		0.071	0.100	0.109	0.108	0.110	0.103	0.154	0.117	0.118	0.145	0.154	0.169	0.187	0.208	0.223	0.219	0.260	0.249
Turb (NTU)			98	8.98	6.15	4.90	4.74	17	1.62	2.90	8.35	1.81	0.93	3.04	2.21	1.40	14.90	6.6	5.21
DO (mg/l)		0.15	0.66	0.23	1.46	0.28	0.28	0.18	0.32	0.67	0.24	0.32	0.37	0.61	0.8	0.39	0.37	0.35	0.31
Eh (mv)		-23.8	-43.5	-60.1	-77.2	-12.4	-114	16	154	-57.8	-103	-103.3	-111.8	-4.3	-217.8	-102.8	-94.6	-129	-96.3
Temp (°C)		9.9	9.3	8.9	7.7	10.2	9	8.9	8.4	8.5	9.48	11.74	10	10.91	10.59	10.84	11.10	11.09	10.08

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-D1(S)

DOWNGRADIENT WELL SCREENED INTERVAL - 5 - 15 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	Jun-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	< 0.2	< 0.2	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<l< td=""><td><1</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<10	<l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><l< td=""></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<1	<l< td=""><td><l< td=""></l<></td></l<>	<l< td=""></l<>
ethylbenzene		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.7(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.9(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	_		0.4																					-10												
PCE	5	<0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td></l<></td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td></l<>	<1
TCE	3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td>I(B)</td><td><1</td><td><l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	I(B)	<1	<l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<i< td=""><td><1</td><td><1</td><td><2</td><td><2</td></i<>	<1	<1	<2	<2
vinyl chloride	2	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<></td></l<>	<1		<1	<1	<1	<1	<1	<10	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<2	<1
acetone	700		4	<5	<5	5(R)	16	<5	<5	3(JB)	<5	3(J)	<5	<5	<5	<5	<5		<5	3(JB)	13(B)	<5	<5	<10	<1	2(J)	<5	<5	<5	<5	<5	3(JB)	<5	>5	<5	4(J)
tetrahydrofuran	154	<1	<5	<5	<5	1(R)	<5	<5	<5	<5	<5	<5	<5	3(J)	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	2(J)	<5	<5
2-butanone	200		<5	<5	⊲5	5(R)	<5	<5	<5	0.8(JB)	<5	<5	⊲5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.9(JB)	<1	0.9(JB)	<1	5(B)	3(B)	5(B)	1(B)	1(B)	1(B)	0.7(JB)		<5	<1	<1	<1	1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	0.6(JB)	0.8(JB)	0.7(J)
1,1,1-TCA		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCE	7	<1.3	<1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	-1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<0.7	<0.7	<l< td=""><td><l< td=""><td><1</td><td>0.8(J)</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td>0.8(J)</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	0.8(J)	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	0.5(J)	<1	<1		<1	<1	<l< td=""><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1 1									~.					**								~*						~.								
bromomethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	0.6(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloroform		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	⊲5	<5	<5	<5	<5	<5	<5	-S	⊲5	<5	<5	⊲5	<5		<5	<5	<5	<5	<5	<10	<1	⊲5	<5	<5	<5	<5	<5	<5	<5	<5	⊲5	⊲5
arsenic (dissolved)	10																<1.98		<2.53	<2.53	< 2.08	<2	<1.8	4.8(B)	<1.3	<3	<2.81	<3.45	<3.45	< 3.09	< 0.83	1.5(B)	<1.7	< 0.98	<1.20	
arsenic (total)			4.7(B)	< 2.40	< 2.60	< 2.60	< 3.80	<1.30	<1	< 2.10	<3	< 2.54	<1.81	<1.85	< 2.07	< 2.19	<1.98		< 2.53	< 2.53	< 2.08	<2	<1.8	<1.3	<1.3	<3	3.2(B)	<3.45	<3.45	< 3.09	< 0.83	< 0.83	<1.7	< 0.98	<1.20	
calcium		4,340(B)	2,780(B)	1,730	2,170(B)	1,620	1,290(B)	1,260(B)	328(B)	682	440	678(B)	410	534	613(B)	1.260(B)																				
iron (dissolved)			-,(-,			-,											34.6		98.4(B)	233	138	62.7(B)	18.3(B)	116	23.6(B)	87 5(B)	240	352	260	494	1.340	2.200	1.760	1.730	3.910	
iron (total)		5.750	4.260	438	145(UJ)	586	52.7	81.7	42.8(B)	183	100	187	154	118	122	609	73		121	272	170	194	189	387	49.8(B)	122	277	458	346	609	1,340	2.060	1.760	1,770	4.280	
magnesium		3,150(B)	1,590(B)	1,420(B)	1,500(B)	1,500	1,020(B)	1.010(B)	42.8(B) 431(B)	570	600	678	580	569	552(B)	1,050(B)	,,,		.21		-70	.54	.07	367	49.0(D)	122	211		340	509	1,540	2,000	1,700	1,770	-,200	
manganese (dissolved)		3,130(B)	1,390(B)	1,420(B)	.,.00(13)	1,300	1,020(D)	1,010(B)	431(D)	370	000	0/8	360	309	332(D)	.,0.0(1)	83.1		128	322	247	208	66.5	188	102	107	49.8	69.3	41.4	96.9	32.1	71.1	41.2	44.5	41.5	
		388	154	158	252	177	123	173	54.9	107	63.2	80.5	59.5	81.6	56.7	174	89.3		128	304	233	177	65.5	192	102	110	49.8	67.5	41.1	88.4	32.1	72.4	42.2	45.1	40.2	
manganese (total)		388 1,490(B)	577(B)	327(B)	595	<400	<336	<2,340	54.9 140(B)	<421	<500	80.5 <419	<419		<450				127	304	233	1//	03.3		100	110	49.3		41.1		32.3		42.2	45.1	40.2	
potassium sodium		1,490(B) 16,700	577(B) 10,100	327(B) 11.700	13.600	9,790	<336 8,060	9,570	3,550(B)	<421 5.480	4,640	<419 8,150	3 680	<435 5.610	<450 3.960(B)	710(B) 6.740							4.400													
pH (SU)		10,700	10,100	4.51	4.74	9,790	4.39	4.78	3,330(B) 4,64	4.95	4,640	4.46	4.74	4.40	4.68	4.71	3.51		4.63	4.48	4.76	4.60	4,400	4.72	4.39	4.53	4.59	4.66	4.47	4.63	4.46	4.84	4.87	4.83	4.85	4.69
																	0.057			0.073									0.041					0.040		
SC (mS/cm)				0.132	0.128		0.084	0.059	0.043	0.104	0.047	0.083	0.047	0.063	0.013	0.042			0.053		0.044	0.065	0.045	0.071	0.068	0.062	0.055	0.060		0.063	0.036	0.034	0.300		0.047	0.044
Turb (NTU)				1.50	2		0	0	5	0	0	-10	0	0	0	0	0		5.60	3.20		1.51	1.70	4.40	3.60	0.39	2.14	1.90	0.34	0.27	0.00	1.19	0.63	1.25	41.8	0.47
DO (mg/l)				0.80	3.88		3.86	4.71	2.53	1.55	3.56	0.84	2.07	0.42	0.19	0	1.21		0.32	0.95	2.94	3.69	12.02	1.61	1.21	2.22	0.75	0.01	1.99	0.36	1.16	0.22	0.29	1.16	0.24	0.44
Eh (mv)				332	343		272	164	200	380	274	289	279	208	241	346	116		176	141	197	2.10	206	286	137	298	145	313.4	362.8	312.9	157.9	105.7	133.1	218.9	155	185.3
Temp (°C)				11	6.4		7.4	8.2	8.6	8.7	6.9	7.2	6.6	11	8	9.1	12		11	11	7.3	8.6	8.2	11	7.6	8.2	8.5	11.97	11.91	11.39	8.92	11.76	9.57	10.18	7.86	6.41
Water Level Elevation	149.00	145.02	141.48	144.97	144.98	143.22	144.82	145.01	144.19	145.06	144.97	144.49	144.93	143.46	144.32	144.29	144.69	144.78	144.91	141.06	144.78	144.18	145.46	144.92	144.92	144.98	144.94	145.86	144.96	144.99	144.85	143.64	144.90	144.87	143.90	144.85

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-D2(D)

DOWNGRADIENT WELL SCREENED INTERVAL - 50 - 60 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	Jun-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ethylbenzene		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	0.7(JB)	<1	<1	0.6(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	0.9(J)	<1	<1	<1		<1	<1	<1	<1	0.5(J)	<10	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1		-0.4	-0.4	-1	-1	-1	-1	<1	a	-1	-1	-4	-1	0.9(1)	<1	a	-1		<1	-1	-1	-1	-1	<10	a	-1	- 4	-1	-1	-1	-1	-1	-1	-1	-1	a
PCE TCE	5	<0.4	< 0.4	<1	<1	<1	<1		<1	<1	<1	<1	<1	0.8(J)		<1	<1			<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	5	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td>2(B)</td><td><1</td><td><l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	2(B)	<1	<l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>		<1	<1	<1	<1	<1	<10	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<></td></l<></td></l<>	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<></td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<>	<1	<1	<1	<1	<1	<1	<2	<1
vinyl chloride	2	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<>	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
acetone	700		<5	<5	<5	5(R)	12	<5	<5	1(JB)	<5	10	<5	<5	<5	<5	<5		<5	<5	14(B)	<5	<5	<10	<1	2(J)	<5	<5	<5	<5	3(J)	<5	<5	<5	<5	4(J)
tetrahydrofuran	154	7	⊲5	<5	<5	1(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	14	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	⊲5
2-butanone	200		<5	<5	<5	5(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.7(JB)	<1	1(B)	<1	7(B)	6(B)	5(B)	1(B)	1(B)	0.8(JB)	<1		<1	<1	<1	<1	<1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	1(JB)	1(JB)	<5
1,1,1-TCA		< 0.5	< 0.5	-1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	~1	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
1,1-DCA		<0.3	< 0.3	<1	<1	<1	<l< td=""><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td>ZI</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td>ZI</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	ZI	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1 <1	<1 <1	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
1,1-DCE	7	<1.3	<1.3	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<0.7	<0.7	<1	<1	<1	0.8(J)	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1 1	,			<u></u>	<.1	<.1	0.0(3)	<.1	<.1	<u></u>	<u></u>	<1	<u></u>	<1	<.1	<u></u>	<u></u>		<u></u>	<.1	\.	<.1	<.1	<10	<.1	<1	<1	<u></u>	<.1	<.1	\.	<u></u>	<1			
bromomethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<2	<1
chloroform		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-21	<1	<1	<1		<1	<1	<1	<1	-21	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<l< td=""><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<0.4	< 0.4	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1 <1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<l< td=""><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<></td></l<>	<10	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<>	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td></l<>	<1	<1
2-hexanone		<0.5	<5			<5		<5	-5	<5	<5		-5	- 6		- 5	-5		- 5	- 6	<5	<5	<5	<10	<1		- 5		- 5		<5	-5	- 5	<5	<5	o 5
arsenic (dissolved)	10																28.2		26.2	26.9	28	27.5	31.5	29.6(E)	29.7	31.6	28.5	29.2	30	22.5	18.5	23.7	16.5	27.4	16.2	
arsenic (total)			64.5	53.1	34.4	34.8	31.7	32.3	34.2	33.5	30	29	30	30.4	31.7	29.5	29.2		35	28.7	26.2	28	30.8	28.6	28.6	31.4	33.5	27.7	28.4	26.5	16.5	23.2	16.5	27.1	17.6	
calcium		46,200	20,700	10,200	9,190	8,180	8,980	8,110	8,080	9,160	9,020	8,420	7.810	8,380	8,550	8,820					20.2		50.0	20.0	20.0			27.7	20.4	20.0						
iron (dissolved)		40,200	20,700	10,200	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,100	0,700	0,110	0,000	2,100	>,020	0,420	7,010	0,500	0,550	0,020	4.050		4,320	4.530	4,250	4.480	4.630	3,440	3,890	4,420	4,250	4,290	4,420	4,100	3.200	3.980	2.660	4,450	2,750	
iron (total)		93,800	83,500	4,730	4,970	4,290	4,520	4,050	4,550	4,830	4,630	4,490	4,420	4,330	4,720	4,950	4,140		30,100	4,730	4,300	4,560	4,960	3,710	4.180	4,460	4,910	4,380	4,480	4,530	2,940	3,970	2,540	4,400	3,040	
magnesium		24,000	21,000	3,450	2.710(B)	2,480	2.640(B)	2,440(B)	2,400(B)	2,740	2,680	2.550(B)	2.410	2,520	2.530(B)	2.640(B)	4,140		30,100	4,730	4,500	4,500	4,700	3,710	4,100	4,400	4,910	4,360	4,400	4,330	2,540	3,910	2,340	4,400	3,040	
		24,000	21,000	3,430	2,710(B)	2,460	2,040(B)	2,440(B)	2,400(B)	2,740	2,000	2,330(B)	2,410	2,320	2,330(B)	2,040(D)	417		448	446	393	440	410	340	397	413	417	405	429	385	264	410	244	415	249	
manganese (dissolved)		2.330	1,780	<100	448	418	422	402	430	472	436	453	416	442	442	460	417		448 874	446	393	440	423	362	413	413	417	405 392	429	385	244	410		403	276	
manganese (total)		,				1.500						453 1.650(B)	1.040		1.550(B)								423							3/9		407	225			
potassium sodium		18,500 15,100	18,700 10,800	2,080(B) 8,210	<1,910 6,880	6,270	2,030(B) 6,430	<2,340 7,230	1,400(B) 6,600	1,690 6,440	1,500 6,460	6,120	5,970	1,580 6,260	6,160	1,980(B) 6,140							6,440													
pH (SU)			10,800	7.06	7.15		7				7.01	6.95	7.12		7.02		6 10		6.19	6.99	6.93	7.19		7.15	6.73	6.93	6.96	6.97	6.93	7.12	6.7	6.96	6.91	7.01	6.87	6.70
pH (SU) SC (mS/cm)					0.104		1.04	7.86	6.93	8.27				6.92		6.87	6.19		6.48 0.071				6.91	7.15			6.86					6.86	0.098			0.103
				0.131			1.04	0.059	0.098	0.162	0.099	0.117	0.990	0.110	0.068	0.059	0.099			0.101	0.069	0.102	0.092	0.090	0.108	0.101	0.106	0.104	0.104	0.104	0.096	0.089		0.107	0.112	
Turb (NTU)				18.9	23		4	7	0	2	0	0	2	0	0	0	1		727	5.38		1.23	5.00	0	4.30	0.62	4.83	3.32	2.27	7.20	1.20	2.64	1.22	2.30	39.0	4.43
DO (mg/l)				0.50	1.01		0.24	3.10	0.40	1.12	0.42	0.03	0.46	0.17	0.20	0	0.35		0.22	0.79	0.29	0.48	11.6	0.66	0.38	0.27	1.42	0.35	0.43	0.89	1.28	0.38	1.10	0.18	0.53	1.78
Eh (mv)				114	41		-82	-227	117	-73	-10	-86.4	-62	-37	-86	-33	-11.1		-62	-94.9	-21.9	-141	-41	-98.8	-44.7	16.7	-81.6	-109.6	-94.8	-92.9	-12.9	-98.4	-55.6	-121.3	-88	-13.8
Temp (°C)				9.4	8.4		8.5	7.8	8.8	8.3	7.9	7.4	7.9	8.5	8.7	8.5	9.1		9.5	9.5	8.1	8	9.2	9.2	9.6	7.7	11.2	9.54	12.52	9.89	9.18	9.30	10.16	9.10	9.04	7.80
Water Level Elevation	148.99	145.72	143.67	143.28	145.53	144.59	145.17	145.73	144.70	145.90	145.69	144.98	144.87	144.83	145.40	145.31	145.09	145.24	145.44	143.02	145.24	144.96	145.78	145.51	145.82	145.69	145.94	144.97	146.36	145.59	145.64	144.90	145.45	145.68	144.55	145.77

SUMMARY OF GROUND WATER ANALYTICAL DATA SB-D3(I)

SCREENED INTERVAL - 35 45 FEET BGS

SOUTHERN PLUME PDI DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09	May-09
benzene	5	<1	<1	<1
ethylbenzene		<1	<1	<1
toluene	1,000	<1	<1	<1
xylenes (total)		<3	<3	<3
, (,		-		-
PCE	5	<1	<1	<1
TCE	5	<1	<1	<1
cis-1,2-DCE	70	<1	<1	<1
vinyl chloride	2	<2	<2	<1
acetone	700	<5	<5	<5
tetrahydrofuran	154	<5	<5	<5
2-butanone	200	<5	<5	<5
4-methyl 2-pentanone	350	<5	<5	<5
methylene chloride	5	<5	<5	<5
1,1,1-TCA		<1	<1	<1
1,1-DCA		<1	<1	<1
1,1-DCE	7	<1	<1	<1
1,2-DCA	5	<1	<1	<1
bromomethane		<2	<2	<1
chloromethane		<2	<2	<1
chloroform		<1	<1	<1
dibromochloromethane		<1	<1	<1
bromoform		<1	<1	<1
carbon disulfide		<1	<1	<1
styrene		<1	<1	<1
chloroethane	14,000	<2	<2	<1
chlorobenzene		<1	<1	<1
1,2-dichloropropane		<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1
2-hexanone		<5	<5	<5
arsenic (dissolved)	10	63.9	47.8	56
arsenic (total)		68.6	47.1	58
calcium		2.00	 2.550	200
iron (dissolved)		2,690	3,570	298
iron (total)		3,290	3,690	2,990
magnesium		 504		424
manganese (dissolved)		504		424
manganese (total)		498		430
potassium sodium				
pH (SU)		9.09	6.94	7.03
		9.09 0.128		0.122
SC (mS/cm)		92.1	0.118	0.122
Turb (NTU)		92.1 0.15	57.7 0.29	0.61
DO (mg/l) ORP (mv)		-65	-83	0.41 -94.9
Temp (°C)	 N/A	9.88	12.49	8.29
Water Level Elevation	NA	144.78	145.08	

NOTES

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- $3. \ \ ICL = Interim\ Cleanup\ Level.$
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-204(IA)

SOUTHERN PLUME PDI DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	0.6 (J)	0.4(J)
ethylbenzene		<1	<1
toluene	1,000	<1	<1
xylenes (total)		<3	<3
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	<1	<1
vinyl chloride	2	<2	<2
•			
acetone	700	<5	<5
tetrahydrofuran	154	<5	<5
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.9(JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	0.3(J)
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	<1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
1 1 10 1			
carbon disulfide		<1	<1
styrene	14.000	<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		<1	<1
1,2-dichloropropane 1,1,2-trichloroethane		<1 <1	<1 <1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	6.9 B	<1.2
arsenic (total)		7.6 B	<1.2
calcium			
iron (dissolved)		30,600	23,000
iron (total)		31,300	22,600
magnesium			
manganese (dissolved)		605	
manganese (total)		606	
potassium			
sodium			
pH (SU)		6.02	7.46
SC (mS/cm)		0.380	0.315
Turb (NTU)		118	2.4
DO (mg/l)		0.15	0.31
ORP (mv)		-51	-23
Temp (°C)		5.42	11.63
Water Level Elevation	NA	142.75	142.92
			.,-

- Laboratory analytical results are reported in ug/L (micrograms per liter).
 DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm $\,$ (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-206(S)

SCREENED INTERVAL - 3 - 13 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

benzene thylbenzene totolene	constituent (ppb)	ICL	Apr-09
Industry Industry	benzene	5	1 (J)
Xylenes (total)	ethylbenzene		<1
PCE TCE TCE TCE TCE TCS TO TO TO TO TO TO TO TO TO T	toluene	1,000	<1
TCE cis-1,2-DCE vinyl chloride 2	xylenes (total)		<3
TCE cis-1,2-DCE vinyl chloride 2			
cis-1,2-DCE 70 0,7 (J) vinyl chloride 2 <2	PCE	5	<1
vinyl chloride 2 <2	TCE	5	<1
acetone tetrahydrofuran 154	cis-1,2-DCE	70	0.7 (J)
tetrahydrofuran	vinyl chloride	2	<2
tetrahydrofuran			
2-butanone 4-methyl 2-pentanone methylene chloride 5 5 5 5 1,1,1-TCA 1,1-DCA 1,1-DCA 1,1-DCE 7 1,2-DCA 5 0.8 (J) bromomethane chloroform dibromochloromethane bromoform carbon disulfide styrene chloroethane chlorofothane chloroethane chlorobenzene 1,2-dichloropropane 1,1,2-trichloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane	acetone	700	2.0 (J)
4-methyl 2-pentanone methylene chloride 350 <5	tetrahydrofuran	154	<5
methylene chloride 5 <5	2-butanone	200	<5
1,1,1-TCA	4-methyl 2-pentanone	350	<5
1,1-DCA 0.6 (J) 1,1-DCE 7 <1	methylene chloride	5	<5
1,1-DCA 0.6 (J) 1,1-DCE 7 <1			
1,1-DCE 7 <1			
1,2-DCA 5 0.8 (J) bromomethane <2	*		0.6 (J)
bromomethane chloroform dibromochloromethane bromoform carbon disulfide styrene chloroforne dibromochloromethane bromoform carbon disulfide styrene chloroethane chloroethane chlorobenzene 11,2-dichloropropane 1,1,2-trichloroethane cis-1,3-dichloropropene trans-1,3-dichloropropene trans-1,3-dichloropropene stylene clarely-alichloropropene trans-1,3-dichloropropene clarely-alichloropropene stylene s		-	
chloromethane <2	1,2-DCA	5	0.8 (J)
chloromethane <2			
chloroform <1			
dibromochloromethane <1			
bromoform < -1 carbon disulfide < -1 styrene < -1 chloroethane < -1 th.2-dichloropropane < -1 1,1,2-trichloropropene < -1 1,1,2-trichloropropene < -1 1,1,2-tetrachloropropene < -1 1,1,2,2-tetrachloroethane < -1 1,1,2,2-tetrachloroethane < -1 2-hexanone < 5 arsenic (dissolved) 10 3.2 (B) arsenic (total)			
carbon disulfide <1			
styrene <1	bromoform		<1
styrene <1	carbon disulfide		<1
chloroethane 14,000 <2			
chlorobenzene <1	,		
1,2-dichloropropane <1			
1,1,2-trichloroethane <1			
cis-1,3-dichloropropene <1			, and the second
trans-1,3-dichloropropene			
1,1,2,2-tetrachloroethane <1			
2-hexanone <5			<1
arsenic (total) 3.3 (B) calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium pH (SU) 6.02 SC (mS/cm) 0.479			
arsenic (total) 3.3 (B) calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium pH (SU) 6.02 SC (mS/cm) 0.479	arsenic (dissolved)	10	3.2 (B)
calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
iron (total) 24,300 magnesium manganese (dissolved) manganese (total) pH (SU) 6.02 SC (mS/cm) 0.479			
iron (total) 24,300 magnesium manganese (dissolved) manganese (total) pH (SU) 6.02 SC (mS/cm) 0.479	iron (dissolved)		22,400
magnesium manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			· ·
manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479	` '		-
manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
pH (SU) 6.02 SC (mS/cm) 0.479			
SC (mS/cm) 0.479	sodium		
	pH (SU)		6.02
	SC (mS/cm)		0.479
Turb (NTU) 123	Turb (NTU)		123
DO (mg/l) 0.43	DO (mg/l)		0.43
ORP (mv)54	ORP (mv)		-54
Temp (°C) 9.04			9.04
Water Level Elevation NA 144.02	Water Level Elevation	NA	144.02

- Laboratory analytical results are reported in ug/L (micrograms per liter).
 DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Tetrachloroethene.$
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical
- Quantitation Limit (PQL).

 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-207(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	21	20
ethylbenzene		7	6
toluene	1,000	3	2
xylenes (total)		13	11
Aylenes (total)		13	
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	2	2
vinyl chloride	2	<2	0.4 (J)
vinyi emoriae	2	\ <u></u>	0.4 (3)
acetone	700	17	10
tetrahydrofuran	154	1400	870
2-butanone	200	8	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	2 (JB)	2 (JB)
incuryione emoride	3	2 (3B)	2 (3B)
1,1,1-TCA		<1	<1
1,1-DCA		3	3
1,1-DCE	7	<1	<1
1,2-DCA	5	0.8 (J)	0.9 (J)
1,2 Den	3	0.0 (0)	0.5 (0)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
			**
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	5	5
chlorobenzene		1 (J)	0.8 (J)
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	17.8	20.8
arsenic (total)		17.5	21.0
calcium			
iron (dissolved)		87,100	
iron (total)		85,800	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		7.55	6.23
SC (mS/cm)		4.18	3.60
Turb (NTU)		24.0	
DO (mg/l)		0.20	0.18
ORP (mv)		-19	37
Temp (°C)		12.56	10.91
Water Level Elevation	NA	149.34	148.60
		* * *	****

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- $2. \ \ DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl \ Ethyl \ Ketone \ (2-butanone);$ MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- $6. \ \ J = Denotes \ an \ estimated \ value; constituent \ detected \ at \ a \ concentration \ below \ the \ Practical$ Quantitation Limit (PQL).
- $7. \ \ UJ = Indicates \ an \ estimated \ quantitation \ limit.$
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.

 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-208(S)

SCREENED INTERVAL - 2 - 12 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09
benzene	5	0.3(J)
ethylbenzene		<1
toluene	1,000	<1
xylenes (total)		<3
		-
PCE	5	<1
TCE	5	<1
cis-1,2-DCE	70	0.8(J)
vinyl chloride	2	0.3(J)
· myr emonae	_	0.0(0)
acetone	700	<5
tetrahydrofuran	154	<5
2-butanone	200	<5
4-methyl 2-pentanone	350	<5
methylene chloride	5	<5
, and the second		
1,1,1-TCA		<1
1,1-DCA		0.3(J)
1,1-DCE	7	<1
1,2-DCA	5	0.6(J)
		` ,
bromomethane		<2
chloromethane		<2
chloroform		<1
dibromochloromethane		<1
bromoform		<1
carbon disulfide		<1
styrene		<1
chloroethane	14,000	<2
chlorobenzene		<1
1,2-dichloropropane		<1
1,1,2-trichloroethane		<1
cis-1,3-dichloropropene		<1
trans-1,3-dichloropropene		<1
1,1,2,2-tetrachloroethane		<1
2-hexanone		<5
arsenic (dissolved)	10	2.5 (B)
arsenic (total)		3.0 (B)
calcium		
iron (dissolved)		33,200
iron (total)		34,700
magnesium		
manganese (dissolved)		
manganese (total)		
potassium		
sodium		
pH (SU)		5.84
SC (mS/cm)		0.448
Turb (NTU)		61.7
DO (mg/l)		0.15
ORP (mv)		-50
Temp (°C)		9.78
Water Level Elevation	NA	144.74

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-208(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	16	4
ethylbenzene		7	2
toluene	1,000	2	0.5 (J)
xylenes (total)		6	<3
Aylenes (total)		Ū)
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	2	0.4 (J)
vinyl chloride	2	<2	0.5 (J)
vinyi emoride	-	\2	0.2 (0)
acetone	700	14	3 (J)
tetrahydrofuran	154	960	40
2-butanone	200	<5	2 (J)
4-methyl 2-pentanone	350	6	<5
methylene chloride	5	0.9(JB)	0.6(JB)
incury tene emoriae	3	0.5(0.5)	0.0(01)
1,1,1-TCA		<1	<1
1,1-DCA		2	0.5 (J)
1,1-DCE	7	<1	<1
1,2-DCA	5	2	0.6 (J)
1,2 Den	3	_	0.0 (0)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
oromorom.		**	~~
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	3	<2
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	18.7	11.2
arsenic (total)		18.3	12.9
calcium			
iron (dissolved)		170,000	
iron (total)		160,000	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		5.59	6.31
SC (mS/cm)		3.45	1.16
Turb (NTU)		88.1	
DO (mg/l)		0.25	0.22
ORP (mv)		-32	-95
Temp (°C)		9.87	10.91
Water Level Elevation	NA	146.66	145.89
Trater Devel Dievation	11/1	170.00	170.07

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- $8. \ \ E = Result \ exceeded \ calibration \ range \ \ estimated \ value.$
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-209(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	14	8
ethylbenzene		7	5
toluene	1,000	2	2
xylenes (total)		12	5
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	0.7(J)	0.7 (J)
vinyl chloride	2	<2	0.7 (J)
	=00	4.0	4.5
acetone	700	10	4 (J)
tetrahydrofuran	154	340	70
2-butanone	200	3(J)	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.8 (JB)
1,1,1-TCA		<1	<1
1,1-1CA 1,1-DCA		3	1
1,1-DCE	7	<1	<1
1,1-DCE 1,2-DCA	5	1(J)	1
1,2-DCA	3	1(3)	1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	2	0.7 (J)
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	19.6	20.6
arsenic (total)		18.8	20.4
calcium			
iron (dissolved)		135,000	
iron (total)		133,000	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		6.13	6.20
SC (mS/cm)		2.27	1.57
Turb (NTU)		146	
DO (mg/l)		0.26	0.38
ORP (mv)		-73	-65
Temp (°C)		10.49	10.87
Water Level Elevation	NA	146.7	146.15

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Tetrachloroethene.$
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.

 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.



APPENDIX C MODIFIED TABLE 5 FROM OMM PLAN

MODIFIED TABLE 5 FROM OMM PLAN MATRIX OF MONITORING ACTIVITIES SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

		HYDRAULIC	MONITORING	GROUND WATER QUALITY MONITORING								
WELL ID	STRATIGRAPHIC UNIT	ANNUAL BASELINE	CONTINUOUS HYDRAULIC INFLUENCE	ANNUAL BASELINE SAMPLING	QUARTERLY REMEDY PERFORMANCE MONITORING							
		GAUGING	MONITORING	(APRIL)	JULY	OCTOBER	DECEMBER					
'	•		Existing Monitor	ring Wells			•					
MW-206(I)	UUI	X	X									
PT-1	LUI	X	X									
PT-2	LUI	X										
PT-3	LUI	X										
SB-B1(S)	US	X		X								
SB-B2(I)	UUI	X	X	X	X	X	X					
SB-B3(D)	LUI	X	**	X								
B-10WT	US US	X X	X	X								
MW-200(S)	UUI	X	v	X	v	v	v					
MW-200(I) MW-200(D)	LUI	X	X	X	X	X	X					
SB-10I	UUI	X	1	X		+						
SB-10D	LUI	X		A		1						
SB-D1	US	X		X			<u> </u>					
SB-D2	UUI	X		X								
SB-D3I	UUI	X	X	X								
SB-4D	UUI	X										
SC-10US	US	X										
SC-10UUI	UUI	X										
SC-10LUI	LUI	X										
SC-11US	US	X										
SC-11UUI	UUI	X										
SC-18US	US	X										
SC-18UUI	UUI	X										
B-4W	US	X										
SB-8U	UUI	X										
SB-8D	LUI	X										
SB-A1	US	X										
SB-A2	US US	X X										
MW-201(S) MW-201(I)	UUI	X					-					
MW-201(I)	LUI	X										
MW-201(D)	US	X				+						
MW-202(S)	US	X		1		1						
MW-204(S)	US	X	 	1		1						
MW-204(IA)	UUI	X	X	X								
MW-204(IB)	UUI	X										
MW-204(D)	LUI	X		1								
MW-205(I)	UUI	X										
SC-8US	US	X			<u> </u>							
SC-8UUI	UUI	X										
SC-8LUI	LUI	X										
SB-C1	US	X										
SB-C2	UUI	X	ļ			<u> </u>						
B-8WT	US	X	1			-						
MW-102S	US UUI	X										
MW-102U	UUI	X	N Df-			1						
MW 206(6)	TIG.	v	New Performance Mo			1						
MW-206(S)	US UUI	X	X	X	X	X	X					
MW-207(I) MW-208(S)	US	X X	X	X	A	Α	A					
MW-208(S) MW-208(I)	UUI	X	X	X	X	X	X					
MW-208(I) MW-209(I)	UUI	X	X	X	X	X	X					

TABLE 1 SUMMARY OF PUMPING PERIODS SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Pumping Period Ini	Average System Flow Rate (gpm) itial Pilot Test	Wells Operating	Total Volume Extracted To Date (gallons)
November 29 to December 1, 2007	1.3	MW-206(I) SB-4D	7,115
Pil	ot Test Period		
April 16 to April 19, 2008	2.2	MW-206(I) SB-4D	15,441
May 1 to May 5, 2008	2.4	MW-206(I) SB-4D	30,605
May 12 to June 10, 2008	0.7	MW-206(I)	56,342
June 13 to June 17, 2008	0.7	MW-206(I)	60,590
2	2008 Season		
June 20 to July 15, 2008	1.3	SB-4D	104,782
July 15 to August 5, 2008	0.8	MW-206(I)	130,030
August 5 to November 11, 2008	1.4	MW-206(I) SB-4D	256,588
November 11 to November 25, 2008	1.4	SB-4D	273,588
2009	Season (to date)		
April 29 to July 28, 2009	1.7	MW-206(I) SB-4D	396,756

- 1. gpm = gallons per minute.
- 2. Average system flow rates were calculated using manual flow measurements collected throughout the specified pumping period. When more than one well was pumping, flow rates for the individual wells were added to calculate the system flow rate.

TABLE 2A TABLE 2A SUMMARY OF LABORATORY ANALYSES - FRAC TANK WITH POTW LOCAL LIMITS AND SCREENING LEVELS - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

					NEW HAMPSHIKE				
		Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water	Combined Water
		SB-4D and MW-206(I)	SB-4D and MW-206(I)	MW-206(I)	MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)	SB-4D and MW-206(I)
		FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK	FRAC TANK
Analyte/Parameter	Local Limit	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
Total Arsenic	0.4	0.09	0.30	0.030	0.051	0.050	0.032	0.015	0.036
Total Cadmium	0.02	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Chromium	4.03	<0.05	0.05	< 0.50	<0.05	0.34	< 0.05	< 0.05	< 0.05
Total Copper	3.46	< 0.05	< 0.05	< 0.50	<0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Lead	0.806	< 0.01	< 0.01	0.38	< 0.008	<0.008	<0.008	<0.008	<0.008
Mercury	0.004	<0.009	<0.009	0.36	<0.009	<0.008	< 0.0009	< 0.0009	<0.0009
Total Nickel	1.07	<0.009	0.12	<0.50	<0.009	0.89	< 0.009	<0.009	<0.009
Selenium		<0.05		0.06					
	8.55		< 0.05		<0.05	<0.05	< 0.05	< 0.05	< 0.05
Silver	0.713	<0.007*	<0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
Total Zinc	4.33	< 0.05	0.07	0.99	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Cyanide	0.363	< 0.02	< 0.02	< 0.02		<0.02	< 0.02	< 0.02	< 0.02
Total Phenol	182	< 0.05	0.09	0.20	0.08	2.1	< 0.05	< 0.05	0.51
Analyte/Parameter	Screening Level	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
1,1,1-Trichloroethylene	1.55	<0.01**	<0.01**	<0.01**	<0.002**	<0.002**	<0.002**	<0.002**	<0.002**
1,1-Dichloroethane	4.58	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,2,4-Trichlorobenzene	0.43	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,2-Dichlorobenzene	3.74	< 0.01	< 0.01	< 0.01	< 0.002	0.002	0.003	0.003	0.002
1,2-Dichloropropane	3.65	< 0.01	< 0.01	< 0.01	< 0.002	<0.002	< 0.002	< 0.002	< 0.002
1,3-Dichloropropene (Total)	0.09	< 0.02	< 0.02	< 0.02	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
1,3-Dichloropropene (1 otai) 1,4-Dichlorobenzene	3.54	<0.02	<0.02	< 0.02	<0.004	<0.004	<0.004	<0.004	<0.004
2-Butanone (MEK)	249	< 0.05	< 0.05	< 0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acetone	1,176	< 0.25	< 0.25	< 0.25	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Acrylonitrile	1.24								
Bromomethane	0.002	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Carbon Disulfide	0.06	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chlorobenzene	2.35	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chloroform	0.42	<0.01	< 0.01	< 0.01	< 0.002	<0.002	< 0.002	< 0.002	<0.002
Chloromethane	0.007	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Dichlorodifluoromethane	0.04	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Ethylbenzene	1.59	0.015	0.21	0.25	0.018	0.009	0.014	0.009	0.012
Ethylene Dichloride	1.05	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Hexachloroethane	0.96	<0.002*	< 0.2	< 0.1					
Hexachloro-1,3-Butadiene	0.0002								
Methylene Chloride	4.15	< 0.025	< 0.025	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	3.34	< 0.025	0.031	< 0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene									
Tetrachloroethylene	0.53	< 0.01	0.26	0.093	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	1.35	0.026	< 0.01	< 0.01	0.044	0.030	0.029	0.012	0.021
trans-1,2-Dichloroethylene	0.28	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Trichloroethylene	0.71	< 0.01	0.036	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Trichlorofluoromethane	1.22	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Vinyl Acetate	1.21						< 0.010	< 0.010	< 0.010
Vinyl Chloride	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Tinyi Cinoride	0.003	0.002	30.002	0.002	10.002	30.002	0.002	30.002	<0.002
Formaldehyde	0.07	0.069/0.084 ^A	0.10/0.036 ^A	1.5 ^B	0.051/0.653 ^C	0.590 ^D	0.076 ^D	0.13 ^D	0.087 ^D
1	İ	ĺ							
Heptachlor	0.003								
1	İ	İ	l	I	I	1		I	1
Sulfate	150/1,500								
Sulfide	1	< 0.04	< 0.04	0.07			< 0.04	< 0.04	< 0.04
Sulfite	2.00								
		1	I	I	I	1		I	ĺ
Oil and Grease	100		I						
			160						
Ammonia-N	90	58	160	28	70	63	72		
pH	<6.0 or >11.0	6.46	6.45	6.28	6.38^	6.22^	6.23^	6.26	6.23
Alkalinity (as CaCO3)	>75.0	530	1,100	1,800	630	540			
Biological Oxygen Demand	791	14	22	17	13	17	12	13	11
Total Suspended Solids	847	110	370	11,000	65	80	42	80	58
ADDITIONAL ANALYS	ES (NON-PERMIT) RI	EQUESTED BY POTW	i					İ	
Analyte/Parameter	1	4/18/2008	5/5/2008	6/10/2008	7/15/2008	8/13/2008	9/16/2008	10/7/2008	11/11/2008
	-	0.007		0.53	< 0.006	< 0.006		< 0.006	< 0.006
Antimony	İ		0.01				<0.006		
Beryllium	1	< 0.004	< 0.004	0.01	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Molybdenum	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thallium	İ	< 0.004	< 0.004	< 0.004	0.005	< 0.004	< 0.002	< 0.002	< 0.002
İ	İ					1			
Tetrahydrofuran		3.0	1.8	1.8	1.3	1.7	1.5	2.3	2.1
Flash Point (Closed Cup)	İ	NonIgnitable	>140	>140	>140	>140			
· · · · · · · · · · · · · · · · · · ·									

- Laboratory analytical results are reported in mg/L (milligrams per liter).
 Bold values exceed laboratory practical quantitation limits (PQLs).

- 2. Bold values exceed laboratory practical quantitation limits (PQLs).

 3. Shaded value exceeds screening criteria.

 4. "<" = Not detected above reported PQL.

 5. --- = Constituent was not analyzed.

 8. **data presented for 1,1,1-ridotoochane.

 7. ^*data reported by two different laboratories (Katabdin/ChemServe).

- 8. B data reported by Alpha Analytical.
- Catar reported by Anjun Analytical)
 Catar reported by two different laboratories (Katahdin/Alpha Analytical).
 Data reported by ChemServe.

 N- sample was analyzed beyond method holding time.
 PoTW = Dover's Publicly Owned Treatment Works.

TABLE 2B

SUMMARY OF LABORATORY ANALYSES - FRAC TANK WITH POTW LOCAL LIMITS AND SCREENING LEVELS - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Local Limit	Combined Water SB-4D and MW-206(I) FRAC TANK	Combined Water SB-4D and MW-206(I) FRAC TANK	Combined Water SB-4D and MW-206(I)
Local Limit			
Local Limit			FRAC TANK
	5/7/2009	6/2/2009	7/7/2009
0.4	0.064	0.054	0.036
* * * * * * * * * * * * * * * * * * * *			<0.004
			< 0.05
			< 0.05
			<0.008
			< 0.0009
			< 0.05
			< 0.05
	< 0.007	< 0.007	< 0.007
4.33	< 0.05	< 0.05	< 0.05
0.363	< 0.02	< 0.02	< 0.02
182	< 0.05	0.05	< 0.05
Screening Level	5/7/2009	6/2/2009	7/7/2009
1.55	<0.010*	<0.002*	<0.002*
4.58	< 0.010	< 0.002	< 0.002
0.43	< 0.010	< 0.002	< 0.002
3.74	< 0.010	0.002	0.003
3.65	< 0.010	< 0.002	< 0.002
0.09	< 0.020	< 0.004	< 0.004
3.54	< 0.010	< 0.002	< 0.002
249	< 0.050	< 0.010	< 0.010
,			< 0.050
			< 0.002
			< 0.002
			0.002
			<0.002
			<0.002
			<0.002 0.021
			<0.002
			<0.005
			< 0.005
			<0.003
			0.017
			< 0.002
			< 0.002
			< 0.002
			< 0.010
0.003	< 0.002	< 0.002	< 0.002
0.07	0.697 ^A	0.310 ^B	0.340^{B}
0.003			
			<0.04
	<0.04		<0.04
100			
90			
<6.0 or >11.0 >75.0	6.3^	6.3^	6.3^
	20	19	25
847	82	95	99
, ,	5/7/2009	6/2/2009	7/7/2009
	< 0.006	0.006	< 0.006
	< 0.004	< 0.004	< 0.004
	< 0.05	< 0.05	< 0.05
	< 0.002	< 0.002	< 0.002
	1.6	1.9	1.6
	0.02 4.03 3.46 0.806 0.004 1.07 8.55 0.713 4.33 0.363 182 Screening Level 1.55 4.58 0.43 3.74 3.65 0.09 3.54 249 1,176 1.24 0.002 0.06 2.35 0.42 0.007 0.04 1.59 1.05 0.96 0.0002 4.15 3.34 0.53 1.35 0.28 0.71 1.22 1.21 0.003 0.07 0.003 150/1,500 1 2.00 100 90 <6.0 or >11.0 >75.0 791 847	0.02	0.02

Notes:

- Notes:

 1. Laboratory analytical results are reported in mg/L (milligrams per liter).

 2. Bold values exceed laboratory practical quantitation limits (PQLs).

 3. Shaded value exceeds screening criteria.

 4. "<" = Not detected above reported PQL.

 5. --- = Constituent was not analyzed.

 6. * data presented for 1,1,1-trichloroethane.

- 7. A data reported by Alpha Analytical.
- 8. B data reported by ChemServe.
- 9. ^ = sample was analyzed beyond method holding time.
- 10. pH measured in standard pH units.
- 11. POTW = Dover's Publicly Owned Treatment Works.

TABLE 3A SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - MW-2061 - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Constituent	POTW Screening Levels	12-May-08	20-May-08	27-May-08	4-Jun-08	10-Jun-08	17-Jun-08	23-Jul-08	29-Jul-08	5-Aug-08	13-Aug-08	19-Aug-08	2-Sep-08	9-Sep-08	16-Sep-08	23-Sep-08	30-Sep-08	7-Oct-08	14-Oct-08	21-Oct-08	27-Oct-08	4-Nov-08	11-Nov-08
benzene	N/A	29	37	19	20	22	56	22	21	19	23	28	27	26	23	23	23	45	26	23	25	25	19
ethylbenzene	1,590	23	33	21	21	23	53	23	24	21	26	26	28	28	26	27	27	41	25	25	26	25	19
toluene	1,350	4	<10	2	3	<10	<10	3	3	2	3	3	3	3	3	3	3	<10	3	2	3	3	2
xylenes (total)	N/A	63	77	45	47	50	122	52	53	48	59	67	72	72	61	67	65	108	67	64	68	67	50
PCE	530	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
TCE	710	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
acetone	1,176,000	<50	<250	<50	<50	<250	<250	<50	<50	< 50	<50	<50	<50	<50	< 50	<50	<50	<250	<50	< 50	<50	< 50	<50
tetrahydrofuran	N/A	2,600	2,700	1,500	3,600	1,700	4,200	3,100	2,400	2,100	1,700	1,900	2,200	2,000	1,900	1,800	1,200	1,500	2,900	2,500	2,200	2,100	2,200
2-butanone (MEK)	249,000	<10	<50	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
MIBK	N/A	<10	< 50	<10	<10	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 50	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<25	<5	<5	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
1,1,1-TCA	1.550**	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1-DCA	4,580	3	<10	2	<2	<10	<10	<2	2	<2	<2	2	2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<5	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
bromomethane	2	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloromethane	7	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloroform	420	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
bromoform	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
styrene	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chloroethane	N/A	3	<10	<2	<2	<10	<10	<2	<2	<2	<2	2	2	2	<2	<2	<2	<10	<2	<2	<2	<2	<2
chlorobenzene	2,350	3	<10	3	3	<10	<10	3	3	2	3	3	4	3	3	3	3	<10	4	3	3	3	2
1,2-dichloropropane	3,650	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<10	<2	<2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	< 50	<10	<10	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 50	<10	<10	<10	<10	<10

- 1. Laboratory analytical results are reported in micrograms per liter (ug/L).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
- MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- PCE = Tetrachloroethene; TCE = Trichloroethene.

 3. N/A = Not Applicable.
- Bold values exceed laboratory practical quantitation limits (PQLs).
- 5. "<" = Not detected above reported PQL.
- 6. * indicates Screening Level for trans-1,2-dichloroethylene.
- 7. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 8. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 3B SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - MW-2061 - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Analyte	POTW Screening Levels	7-May-09	12-May-09	19-May-09	26-May-09	2-Jun-09	9-Jun-09	16-Jun-09	25-Jun-09	30-Jun-09	7-Jul-09	14-Jul-09	20-Jul-09	28-Jul-09
benzene	N/A	29	31	28	31	25	28	27	25	26	22	24	26	26
ethylbenzene	1,590	20	23	19	20	22	22	21	20	22	20	25	26	27
toluene	1,350	<10	<10	2	2	2	3	2	2	3	2	3	3	3
xylenes (total)	N/A	50	58	46	51	50	56	54	51	53	50	67	71	74
PCE	530	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	<250	<250	<50	<50	< 50	< 50	<50	< 50	<50	< 50	<50	<50	<50
tetrahydrofuran	N/A	1,800	2,100	1,800	2,000	2,500	2,000	1,800	1,700	1,900	1,700	1,900	1,600	2,000
2-butanone	249,000	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<25	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	2	<2	<2	<2	<2
chlorobenzene	2,350	<10	<10	3	3	3	3	3	3	3	3	3	3	3
1,2-dichloropropane	3,650	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<10	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	< 50	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- PCE = Tetrachloroethene; TCE = Trichloroethene.
- 3. N/A = Not Applicable.
- 4. "<" = Not detected above reported PQL.
- 5. * indicates Screening Level for trans-1,2-dichloroethylene.
- 6. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 7. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 4A SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - SB-4D - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

	POTW																				
Constituent	Screening	12-May-08	25-Jun-08	1-Jul-08	8-Jul-08	15-Jul-08	5-Aug-08	13-Aug-08	19-Aug-08	2-Sep-08	9-Sep-08	16-Sep-08	23-Sep-08	30-Sep-08	7-Oct-08	14-Oct-08	21-Oct-08	27-Oct-08	4-Nov-08	11-Nov-08	18-Nov-08
	Levels																				
benzene	N/A	35	34	31	35	31	36	32	31	31	30	30	32	30	37	34	29	29	29	19	25
ethylbenzene	1,590	30	22	25	29	25	28	25	19	17	3	8	12	14	11	14	14	19	23	<2	15
toluene	1,350	89	70	74	82	80	50	76	73	69	70	70	55	64	61	58	57	59	67	32	51
xylenes (total)	N/A	92	97	114	130	116	108	118	107	107	118	115	112	114	105	98	109	112	123	78	92
PCE	530	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	56	52	66	<250	51	<50	< 50	<50	<50	<50	<50	<50	< 50	< 50	<50	<50	<50	< 50	<50	< 50
tetrahydrofuran	N/A	3,100	1,900	1,900	1,700	1,300	1,800	2,000	1,200	1,400	1,500	1,700	1,400	3,100	2,200	1,700	1,100	1,700	1,500	1,300	1,500
2-butanone (MEK)	249,000	<10	<10	<10	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	15	<10	<10	< 50	<10	2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	9	7	6	<10	6	9	6	6	6	6	6	6	6	6	<2	<2	5	6	4	4
chlorobenzene	2,350	<2	<2	2	<10	2	<2	2	2	3	2	2	2	2	2	2	2	3	2	<2	<2
1,2-dichloropropane	3,650	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	<10	<10	< 50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

- 1. Laboratory analytical results are reported in micrograms per liter(ug/L).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
- $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Trichloroethene.$
- 3. N/A = Not Applicable.
- 4. Bold values exceed laboratory practical quantitation limits (PQLs).
- "<" = Not detected above reported PQL.
 * indicates Screening Level for trans-1,2-dichloroethylene.
- 7. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 8. *** indicates Screening Level for total 1,3-dichloropropene.

TABLE 4B SUMMARY OF LABORATORY ANALYSES INFLUENT VOC MONITORING - SB-4D - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

Analyte	POTW Screening Levels	7-May-09	12-May-09	19-May-09	•	2-Jun-09	9-Jun-09	16-Jun-09	25-Jun-09	30-Jun-09	7-Jul-09	14-Jul-09	20-Jul-09	28-Jul-09
benzene	N/A	21	35	37	37	33	35	33	34	33	29	34	38	34
ethylbenzene	1,590	23	24	22	23	20	23	26	20	25	27	24	25	29
toluene	1,350	36	38	50	46	46	48	47	41	40	40	39	37	41
xylenes (total)	N/A	118	136	122	119	136	145	134	147	136	137	157	167	158
PCE	530	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
TCE	710	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,2-DCE	280*	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
vinyl chloride	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
acetone	1,176,000	<50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	57	< 50
tetrahydrofuran	N/A	1,500	1,600	1,400	1,400	1,500	1,700	2,900	1,700	2,000	1,500	1,600	2,500	2,700
2-butanone	249,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
MIBK	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	4,150	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-TCA	1,550**	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCA	4,580	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-DCE	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromomethane	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloromethane	7	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroform	420	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
dibromochloromethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bromoform	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
carbon disulfide	60	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
styrene	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
chloroethane	N/A	<2	<2	5	5	5	5	<2	7	6	6	7	7	6
chlorobenzene	2,350	3	3	3	2	3	3	3	3	2	3	3	3	3
1,2-dichloropropane	3,650	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2-trichloroethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	90***	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	90***	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-tetrachloroethane	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-hexanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;

PCE = Tetrachloroethene; TCE = Trichloroethene.

- 3. N/A = Not Applicable.
- 4. "<" = Not detected above reported PQL.
- 5. * indicates Screening Level for trans-1,2-dichloroethylene.
- 6. ** indicates Screening Level for 1,1,1-trichloroethylene.
- 7. *** indicates Screening Level for total 1,3-dichloropropene.

September 14, 2009

GeoInsight Project 2009-009:Table 4A and 4B - Summary of Laboratory Analyses SB-4D:TABLE 4B

TABLE 5A MASS REMOVAL CALCULATIONS - 2008 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

_	Const	ituents					Constituent '	Weekly Totals							
Date	Benzene (ug/L)	Tetrahydrofuran (ug/L)	Well Pumping	Approximate Pumping Rate (gpm)	Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)							
			Pilot T	est Period											
04/18/08	22	3,000	Frac Tank	NA	15,441	58,451	1.29E-03	1.75E-01							
05/05/08	ND(10)*	1,800	Frac Tank	NA	15,164	57,402	2.87E-04	1.03E-01							
05/12/08	29	2,600	MW-206(I)	0.88	5,415	20,498	5.94E-04	5.33E-02							
05/20/08	37	2,700	MW-206(I)	0.75	6,606	25,006	9.25E-04	6.75E-02							
05/27/08	19	1,500	MW-206(I)	0.50	6,966	26,369	5.01E-04	3.96E-02							
06/04/08	20	3,600	MW-206(I)	0.65	6,750	25,552	5.11E-04	9.20E-02							
6/10 & 6/17/2008	39**	2,950**	MW-206(I)	0.73	4,248	16,080	6.27E-04	4.74E-02							
	3,700 3,700														
Well ID	Average Benzene concentration (ug/L)	Average Tetrahydrofuran Concentration (ug/L)	Well Pumping	Average Pumping Rate per Well (gpm)	Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)							
MW-206(I)	25	2,106	NA	0.64	86,827	328,677	8.22E-03	6.92E-01							
SB-4D	31	1,679	NA	0.93	126,171	477,608	1.48E-02	8.02E-01							
TOTAL TO DATE:					273,588	1,035,643	2.78E-02	2.07E+00							
SUMMARY															
TOTAL ESTIMAT	ED MASS REMOV	ED IN 2008:					kg	lbs							
Benzene							0.028	0.06							
Tetrahydrofuran							2.073	4.57							

NOTES:

- 1. * = constituent not detected above detection limit; mass removal calculated using half of the detection limit.
- 2. ** = average concentrations calculated from two influent samples collected during pumping period.
- 3. Frac Tank = indicates water sample was collected from fractionation tank (i.e., water storage tank); SB-4D and MW-206I combined effluent.
- 4. NA = not applicable.
- 5. ug/L = micrograms per liter.
- 6. gpm = gallons per minute.
- 7. kg = kilograms.
- 8. lbs = pounds.
- 9. "Gallons Pumped" estimated based upon volume monitoring of frac tank and/or recorded water transfer volume.

September 14, 2009

GeoInsight, Inc. Project: 2009-009:Table 5A and 5B - Mass Removal Calculations

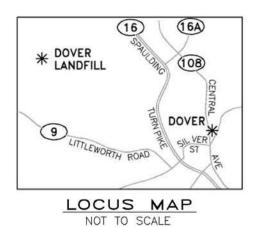
TABLE 5B

MASS REMOVAL CALCULATIONS - 2009 SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

	Const	ituents						Constituent I	Monthly Totals
Date	Benzene (ug/L)	Tetrahydrofuran (ug/L)	Average Benzene (ug/L)	Average Tetrahydrofuran (ug/L)	Wells Pumping	Approximate Gallons Pumped	Liters Pumped	Benzene (kg)	Tetrahydrofuran (kg)
		•		Current Reporting	g Period				
05/07/09	27	1,600							
06/02/09	22	1,900	23	1,700	MW-206(I)/SB-4D	123,168	466,242	1.06E-02	7.93E-01
07/07/09	19	1,600							
TOTAL ESTIMA	TED MASS REMOV	ED DURING CURI	RENT PUMPING	SEASON (April 29	through July 28, 20	09):		kg	lbs
Benzene								0.011	0.02
Tetrahydrofuran								0.793	1.75

- 1. Mass removal calculated using the averages values of Frac Tank samples collected during monthly effluent monitoring.
- 2. Frac Tank = indicates water sample was collected from fractionation tank (i.e., water storage tank); SB-4D and MW-206I combined influent.
- 3. Bold values exceed laboratory practical quantitation limits.
- 4. ug/L = micrograms per liter.
- 5. kg = kilograms.
- 6. lbs = pounds.
- 7. "Gallons Pumped" estimated based upon volume monitoring of frac tank and/or recorded water transfer volume; reported quantity transfer volumes following previous sample date up to and including current sample date.

SITE AREA PLAN

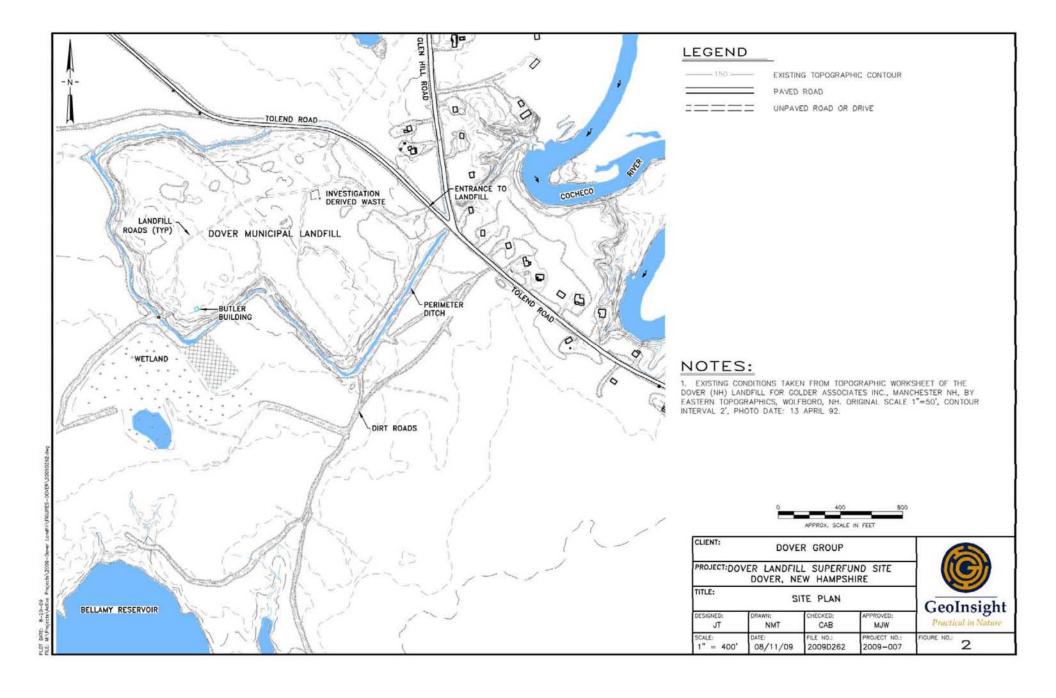


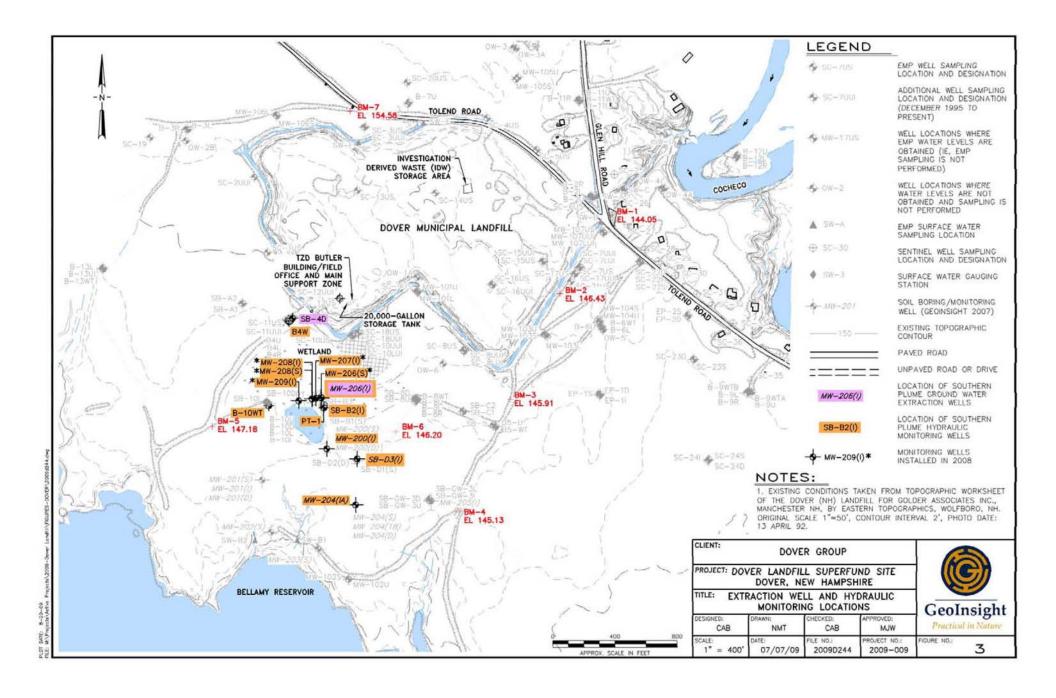
1/2 MILE 1 MILE APPROX. SCALE IN FEET

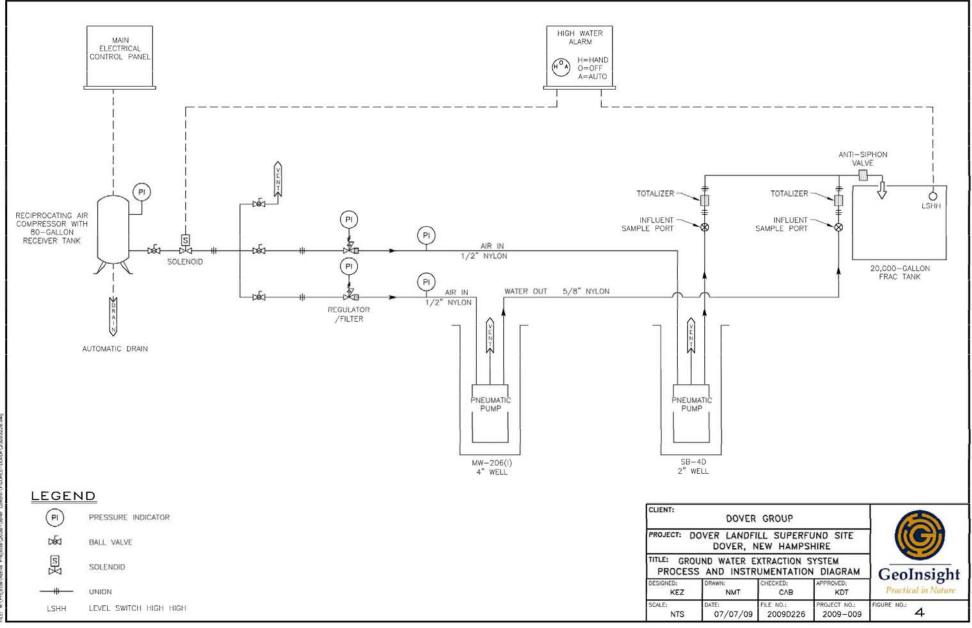
CONTOUR INTERVAL 20 FEET

REFERENCE: TAKEN FROM USGS MAP "DOVER WEST, NH NW/4 15' QUADRANGLE, REVISED 1993.

CLIENT:	DOVE	ER GROUP		
PROJECT: D		FILL SUPERF	Transfer State Transfer	
TITLE:	SITI	E LOCUS		GeoInsight
DESIGNED: CAB	DRAWN: NMT	CHECKED: CAB	APPROVED: MJW	Practical in Nature
SCALE: AS NOTED	DATE: 6/8/07	FILE NO.: 2009-LOCUS	PROJECT NO.: 2009-007	FIGURE NO.:







PLOT DATE: 8-29-09

APPENDIX A SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE



1. GWE system control panel (top right), main electrical control panel (bottom center).



2. 80-gallon reciprocating air compressor inside Butler Building.

APPENDIX A SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE



3. Air line manifold, air filter/regulators, and compressor auto drain.



4. Southeast view of fractionation tank with new manifold and siphon valve on top of tank.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-BI

DOWNGRADIENT WELL SCREENED INTERVAL - 5 - 15 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06*	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09
benzene	5	0.3	0.6	0.4	<1	0.5(J)	<1	<1	<1	0.6(J)	0.7(J)	0.5(J)	0.8(J)	<1	3	0.6(J)	<1	<1	0.5(J)	<1	0.6(J)	0.7(J)	0.7(J)	<10	1	0.9(J)	1	0.9(J)	1	1	1	1	2	2	2
ethylbenzene		0.7	0.8	0.9	0.6(J)	0.7(J)	0.5(J)	<1	0.6(J)	0.6(J)	0.6(J)	<1	1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	0.1(J)	0.2(J)	<10	<1	0.2(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	0.5	0.8	0.4	0.5(J)	<1	0.5(J)	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	0.5	<1	<1	<1	<1	<1	0.9(J)	<1	<1	2	<1	0.9(J)	<1	<1	<1	<1	<1	<1	0.4(J)	<1	<10	<1	<3	<3	<3	3	-3	3	<3	<3	1(J)	0.3(J)
1																										-		-	-	-	-	-			
PCE	5	< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TCE	5	< 0.3	0.4	0.3	<1	0.4(J)	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	7	8	6	4(J)	5	4	3	3	2	3	2	2.5(J)	2	<1	2	<1	1	1	1	2	<1	1	1(J)	<1	0.9(J)	1(J)	0.8(J)	<1	1	0.7(J)	0.9(J)	0.8(J)	1(J)	0.7(J)
vinyl chloride	2	2	2	2	1(J)	<1	1	1	0.7(J)	0.7(J)	1	1(J)	1	<1	<1	0.9(J)	0.7(J)	1(J)	0.5(J)	0.9(J)	2	0.8(J)	<1	1(J)	<1	1(J)	1	0.7(J)	1	1(J)	0.9(J)	0.9(J)	1	0.8(J)	0.7(J)
acetone	700		<5	<5	5(R)	2(J)	12	<5	<5	<5	<5	8	<5	<5	7	<5	<5	<5	<5	<5	13	<5	<5	<10	<1	4(J)	<5	<5	<5	<5	<5	3(JB)	<5	<5	2(J)
tetrahydrofuran	154	<1	<5	11	5(R)	3(R)	<5	<5	<5	<5	<5	<5	6	6	<5	3(J)	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	4(J)	<5	5(J)
2-butanone	200		<5	<5	5(R)	5(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	5(J)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.8(JB)	0.6(J)	1(B)	0.8(J)	3(B)	3(B)	5(B)	1(B)	7(B)	0.8(JB)	0.7(J)	<1	<1	<1	<1	<1	<1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	0.5(JB)	0.4(JB)
1	-						()	(.)	-(-/																						-				
1,1,1,-TCA		<0.5	< 0.5	<0.5	<1 2(T)	<1 2	<1	<1	<1	<1	<1	<1 1(T)	<1	<1	<1	<1 0.7(T)	<1	<1 0 < (T)	<1 0.5(T)	<1 0.5(T)	<1	<1 0.7(T)	<1	<10	<1	<1 0.0(T)	<1	<1 0.5(T)	<1	<1 0.5(T)	<1 0.600	<1 0 < (T)	<1 0.0(T)	<1 0.0(T)	<1 0.0(T)
1,1-DCA			0	4	3(J)		2	2	1	1	1	1(J)	1	<1	<1	0.7(J)	<1	0.6(J)	0.5(J)	0.5(J)	<1	0.7(J)	<1	<10	<1	0.8(J)	<1	0.5(J)	<1	0.5(J)	0.6(J)	U.6(J)	0.8(J)	0.9(J)	0.8(J)
1,1-DCE	7	<1.3	<1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.8(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	0.8	0.7	< 0.7	<1	<1	2	<1	<1	0.5(J)	<1	0.6(J)	0.6(J)	<1	<1	0.8(J)	<1	0.9(J)	1(J)	<1	0.7(J)	<1	0.6(J)	<10	<1	<1	0.8(J)	0.8(J)	<1	1	1	1(J)	0.9(J)	1(J)	1
bromomethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
chloromethane		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.7(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.3(J)	<2
chloroform		< 0.7	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	0.4	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
				10					0.0/7															-10	-1	- 4	- 4	-1	<1	-1	-1	-1	- 4	<1	<1
carbon disulfide		-0.4	<5	10	<1	<1	<1	<1	0.9(J)	<1	<1	<1	<1	<1	<1	<1 <1	<1	<1 <1	<1 <1	<1	-8 -<1	<1 <1	<1	<10	<1	<1	<1 <1	<1 <1		<1	<1	<1	<1 <1		<1
styrene	14.000	<0.4	< 0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1						<1	<10	<1	<1			<1	<1	<1	<1	<1	<1	
chloroethane	14,000		1	<0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
chlorobenzene		< 0.2	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		0.4	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	<5	<5	্	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	< <u>5</u>	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10																<1.98	<2.53	3.3(B)	<2.53	< 2.08	<2	<1.8	4.3(B)	2.4(B)	<3	<2.81	<3.45	<8	<3.09	2.9(B)	2.9(B)	<1.7	2.5(B)	1.8(B)
arsenic (total)				<2.40	<2.60	<2	<3.80	4.80	5.20(B)	2.60(B)	<3.00	<2.54	<1.81	2.60(B)	< 2.07	<2.19	<1.98	<2.53	6(B)	3.0(B)	<2.08	2.2(B)	3.1(B)	1.5(B)	1.4(B)	<3	<2.81	<3.45	<8	< 3.09	4.0(B)	3.3(B)	<1.7	2.6(B)	2.2(B)
calcium		38,400	37,600	26,600	30,000	28,200	28,100	27,100	40,000	32,000	32,400	31,200	30,200	30,000	27,300	27,300																			
iron (dissolved)																	42,500	52,900	49,500	48,000	48,600	39,200	50,000	37,600	43,400	45,600	46,800	40,000	52,900	44,400	53,700	47,100	44,800	48,600	59,900
iron (total)		148,000	170,000	70,700	74,700	71,300	69,000	62,300	82,600	74,000	75,200	72,800	71,200	70,900	65,900	64,300	42,800	53,800	49,100	49,700	48,500	47,200	48,700	17,200	42,800	45,500	47,100	42,800	53,300	45,500	52,800	45,700	45,500	50,000	60,500
magnesium		23,700	29,800	7,470	8,410	7,910	7,800	7,430	13,600	8,540	9,080	8,590	8,420	8,040	7,590	7,560																			
manganese (dissolved)																	603	796	768	718	714	601	755	602	695	705	706	601	799	667	860	735	699	733	
manganese (total)		2,000	2,170	804	890	856	810	803	1,190	964	962	1,020	959	957	892	891	599	762	748	743	720	714	723	281	681	698	707	627	799	686	843	694	709	756	
potassium		18,100	22,700	1,710(B)	<1,680	1,830	1,640(B)	2,460(B)	3,610(B)	2,200	2,300	2,440(B)	1,950	2,580	2,130(B)	2,570(B)																			
sodium		17,100	17,000	17,400	21,000	23,700	24,200	30,200	115,000	34,600	37,500	42,400	41,800	52,100	47,200	52,400																			
pH (SU)				6.06	6.24	5.88	5.98	6.52	6.01	6.85	6.17	6.11	6.28	6.16	6.06	6.34	6.06	6.45	6.08	6.18	6.18	6.08	5.47	6.23	5.71	6.01	6.05	6.16	5.65	6.42	6.11	6.22	6.17	5.98	6.03
SC (mS/cm)				0.564	0.591	0.627	0.615	0.370	0.600	0.753	0.670	0.789	0.736	0.776	0.654	0.434	0.743	0.703	0.628	0.594	0.608	0.740	0.527	0.481	0.587	0.600	0.558	0.578	0.592	0.641	0.61	0.401	0.496	0.599	0.703
Turb (NTU)				4	0	15	7	0	4	-10	0	0	0	0	0	3	3	23	9.60	3	2.10	6.55	0.40	11	3.20	3.61		15	4.81	4.35	0.14	2.19	0.00	2.10	1.68
DO (mg/l)				0.40	0.04	0.05	0.05	3.35	0.43	0.78	0.11	0.16	0.41	0.23	0.08	0	0.58	0.16	0.37	1.81	0.38	0.88	0.50	0.44	0.31	0.24	0.93	0.61	0.24	0.42	0.23	0.23	0.24	0.26	0.18
Eh (mv)				-74	-50	-92.6	-88	-244	-77.1	-51	-17	-28.4	-31	1	-27	-42	33.8	-32	-33	-49.4	-8	-162	-13.7	-14.6	-26.2	-84.7	-24.8	-46.2	-6.3	-84.3	-54.5	-171.3	-28.4	-25.6	-17
Temp (°C)				9.8	7	11	7.6	8.7	9.1	8.8	7.3	8	6.8	11	8.3	10	13	8.4	11	10	8.9	10	8.6	11	7.6	8.8	7.61	11.19	11.24	10.26	8.53	10.96	9.41	11.51	13.84
Water Level Elevation	149.64	145.30	141.92	142.92	145.37	144.38	145,27	145.45	144.45	145.49	145,43	145.32	145.32	144.69	145.13	145.41	145.22	145.28	145.65	142.19	145.24	145.22	145.44	145.42	145,48	145.53	145.42	147.07	145.49	145.54	145.49	144.78	145 40	145.46	144.26

[&]quot;" denotes the ground water sample collected for well SB-B1 was incorrectly identified in the field and on the laboratory analytical report as SB-B3.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-B2

DOWNGRADIENT WELL SCREENED INTERVAL - 34 - 44 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06*	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	Jul-09
benzene	5	6	6	6	8(J)	8(J)	<25	8	11	11	13	15	14	14	33	19	19	20	21	20	26	23	23	26	28	22	24	22	21	25	25	20	27	31	22	25
ethylbenzene		6	6	7	8(J)	9(J)	<25	9	12	13	16	19	19	18	29	24	25	29	22	27	28	25(B)	25	28	<25	24	26	24	22	25	25	10	21	25	16	13
toluene	1,000	2	2	2	<17	<10	<25	<8	4	4	5(B)	6	5	5	<10	6	6	6	6	6	7	6	6	7(J)	<25	5	5	5	5	5	5	3	4	5	4	3
xylene		8	8	10	<17	13	<25	15	21	23	28	39	37	39	<10	55	60	76	65	72	83	73(B)	77	83	<25	70	80	70	70	82	81	30	59	76	55	33
1												-			~10																					
PCE	5	< 0.4	< 0.4	< 0.4	<17	<10	<25	<8	<1	<1	0.7(J)	<1	0.5(J)	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	4(B)	<5	<1	<1	<1	<1	<1	<1	<1	<1
TCE	5	< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	0.5(J)	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	1.3	0.9	1.2	<17	<10	<25	<8	1.6(J)	1	2	1.8(J)	2(J)	0.7(J)	<10	1.9(J)	2	1.8	1	1(J)	1	1	2	<10	<25	1	2	<5	1.8	2	1.9	1.9(J)	2	2	2(J)	0.8(J)
vinyl chloride	2	4	3	4	<17	<10	<25	<8	2	4	4	3	3	<1	<10	3	3	2	2	2	4	3	3	3(J)	<25	2	2	<5	<1	2	0.9(J)	<1	0.7(J)	0.9(J)	<2	0.5(J)
acetone	700		<5	3(J)	83(R)	50(R)	<130	<42	9	5	<5	17	9	7(B)	35(J)	4(J)	4(J)	<5	6(B)	9	38	28	8	<10	<25	17	27	<25	7	29	23	15	14	16	24	7
tetrahydrofuran	154	240	310(E)	360	280(J)	430(J)	510	590	700(E)	750	<5	580	820(E)	1,100	940	1,900	1500(E)	1,400	1,900	1,500	2,400	2,100	1,200	1,700	2,100	2,100	2,100	1,500(B)	680	2,000	1,900	2,100	2,000	1,500	1,600	1,100
2-butanone	200		<5	<5	83(R)	50(R)	<130	<42	<5	<5	<5	<5	7	5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<10	<25	<5	<5	<25	<5	<5	<5	<5	<5	<5	6	<5
4-methyl 2-pentanone	350		11	13(B)	83(J)	<50	<130	5(J)	3(J)	2(J)	<5	3(J)	4(J)	<5	<50	3(J)	<5	<5	<5	<5	4(J)	<5	<5	<10	<25	3(J)	6	<25	<5	<5	<5	3(J)	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<48	<10	44(B)	<8	2(B)	2	3(B)	5(B)	6(B)	2(B)	72(B)	2(B)	2	1(B)	0.9(JB)	2(B)	<1	0.7(T)	13(R)	2(J)	<25	<1	<2	9	<5	17(JB)	0.8(J)	1(J)	1(1)	2(JB)	1(JB)	1(JB)
	-									-			0(2)	2(2)			-					0.7(0)	10(1)										1(0)			
1,1,1-TCA		< 0.5	<0.5	< 0.5	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		0.9	0.8	0.9	<17	<10	<25	<8	2	2	2	2	2	<1	<10	2	2	2	2	2	3	3	3	3(J)	<25	2	3	2(J)	2	3	2	2	3	3	2	2
1,1-DCE	7	<1.3	<1.3	<1.3	<17	<10	<25	<8	<1	<1	<1	<1	0.6(J)	<1	<10	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	1	0.8	0.7	<17	<10	<25	<8	<1	1	<1	1	1	1	<10	2	1	2	2	2	2	2	<1	<10	<25	1	<1	2(J)	1(J)	2	2	1	<1	1	0.9(J)	0.9(J)
bromomethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2
chloromethane		< 0.5	< 0.5	< 0.5	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	0.5(J)	0.6(J)	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<2	<2
chloroform		< 0.7	< 0.7	< 0.7	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1															-10	a	-1	<1	<1	-1	-1		<1	-10	<25	-1	-1	<5	~1	-1	-1	a	<1	-1	-1	<1
carbon disulfide			<5	2(J)	<17	<10	<25	<8	<1	<1 0.6(J)	<1	<1	<1	<1	<10	<1	<1			<1	<1	<1		<10		<1	<1		~.	<1	<1	<1	<1	<.1	<1	
styrene		<0.4	< 0.4	< 0.4	<17	<10	<25	<8	<1	0.6(J)	<1	<1	1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	<0.4	1	1	<17	<10	<25	<8	2		<1	-	2	2	<10	4	3	4	-	<1	4		<1	3(J)	<25	2	2	<5	<u> </u>		2	-		4	2(J)	3
chlorobenzene		0.8	0.8	0.9	<17	<10	<25	<8	1	1	<1	2	2	2	<10	2	2	2	2	2	3	<1	1	3(J)	<25	2	3	<5	<1	3	3	2	3	3	2	2
1,2-dichloropropane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	⊲5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	< 0.2	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	< 0.4	< 0.4	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		< 0.3	< 0.3	< 0.3	<17	<10	<25	<8	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<10	<25	<1	1	<5	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	<83	<50	<130	<42	<5	16	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<10	<25	<5	<5	<25	<5	<5	<5	<5	<5	্ত	<5	<5
arsenic (dissolved)	10																11.7	11.6	13.4	13.2	10.8	13.4	12.2	14.3	15.5	16.8	15.7	3.7(B)	16.8	14.7	17.4	16.5	14.4	14.6	16.5	16.6
arsenic (total)			8.9(B)	6.8(B)	< 5.20	7.40	10.6	8.5(B)	2	3.5(B)	9	10.6	9.40	12	<2.08	10	10.9	11.9	16.6	12.9	11.4	14.2	14.3	8.3(B)	13.7	17.8	14.5	14.9	17.9	16.5	17.3	16.4	15.5	17.0	17.1	18.0
calcium		56,400	50,300	61,600	71,300	66,400	73,400	66,100	28,200	54,200	83,400	87,400	82,600	92,500	27,400	94,800																				
iron (dissolved)																	170,000	166,000	162,000	159,000	153,000	158,000	146,000	132,000	121,000	136,000	126,000	34,800	109,000	106,000	103,000	101,000	63,600	72,200	62,200	
iron (total)		143,000	107,000	130,000	138,000	131,000	160,000	126,000	69,900	160,000	170,000	170,000	155,000	171,000	66,100	172,000	167,000	170,000	154,000	159,000	159,000	161,000	145,000	87,300	113,000	135,000	124,000	122,000	111,000	109,000	104,000	108,000	62,000	75,600	63,400	
magnesium		24,100	17,500	19,200	22,500	21,000	24,300	22,200	7,680	4,020	30,700	32,100	32,000	34,700	7,620	37,400																				
manganese (dissolved)																	1,560	1,540	1,400	1,360	1,210	1,210	1,030	920	814	803	693	662	550	510	453	447	258	276		
manganese (total)		2,690	2,090	2,270	2,520	2,300	2,290	1,980	883	98.3	2,230	2,220	1,990	2,020	889	1,760	1,520	1,550	1,340	1,360	1,250	1,220	1,020	624	758	790	690	620	562	521	463	484	254	290		
potassium		11,400(E)	4,600(B)	3,830	3,960(B)	4,350	5,020	5,390	1,840(B)	12,100	6,400	7,040	6,260	7,150	2,100(B)	8,400																				
sodium		91,700	87,400	118,000	148,000	142,000	183,000	187,000	28,600	238,000	288,000	299,000	327,000	337,000	47,600	370,000																				
pH (SU)	-			6.05	6.21	6.06	6	6.45	5.85	6.62	6.07	6.07	6.13	6.13	5.94	6.07	5.87	6.10	5.92	5.96	5.97	5.98	5.38	6.07	5.48	5.85	5.86	6	5.62	6.26	5.99	5.93	6.18	5.98	5.99	6.08
SC (mS/cm)				1.33	1.80	1.92	2.11	2.03	2.33	2.70	2.62	2.81	2.85	3.12	2.99	3.50	3.27	3.33	3.55	3.37	3.62	4.42	3.26	3.07	3.74	3.83	3.65	3.79	3.802	4.163	3.916	4.978	3.924	3.867	4.24	4.11
Turb (NTU)				7	6	45	3	0	22	2	5	0	1	0	0	63	5	20	95	4.40	11.8	8.19	1.90	7	5	20.3	4.97	5.42	3.3	9.42	0.85	1.48	4.89	0.14	5.82	
DO (mg/l)				0.20	0.04	0.01	0.05	2.88	0.27	0.51	0.36	0.16	0.82	0.21	0.47	0	0.70	0	0.75	3.26	0.91	3.49	0.97	0.45	0.62	0.4	0.93	0.9	0.4	1.59	0.39	0.3	0.96	0.57	0.20	0.14
Eh (mv)				-64	-39	-40	-85	-254	-56.8	-48	-15	-32.5	-35	-2	-24	-51	42.3	-34	-34	-60.1	0.91	-153	-28.2	-15	3.60	-85.5	-18.5	-40.2	-13.5	-91.5	-70.2	-189.2	-54.1	-30.2	19	-4
Temp (°C)				9.4	8.6	9.4	9.3	7.8	10	8.1	8.9	7.7	8.5	9.4	10	9	10	8.1	10	9	10	9.1	11	9.2	9.7	7.4	9.1	10.05	15.11	10.18	9.86	11.93	10.88	11.92	16.58	13.02
	149.33	147.28	144.86	145.11	147.26	146.29	147.01	147.59	146.43	148.16	147.42	146.93	147.22	146.55	146.55	147.08	146,95	147.04	147.18	144.66	147.00	146,93	147.54	147.28	147.58	147.53	147.66	147.07	148.02	147.43	147.46	146.57	147.33	147.37	146.35	145.47

[&]quot;*" denotes the ground water sample collected for well SB-B2 was incorrectly identified in the field and on the laboratory analytical report as SB-B1.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-B3

DOWNGRADIENT WELL SCREENED INTERVAL - 47 - 57 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-04	Dec-04	Jun-05	Jun-06*	Oct-06	Jun-07	Oct-07	Apr-09
benzene	5	2	1	1	4.9	4	4	4	5	5	6	4
ethylbenzene		2	1	2	3.3	3	2	3	3	3	4	2
toluene	1,000	0.5	0.4	0.6	<1	<1	<1	0.7(J)	<1	<1	<1	0.6(J)
xylene		1.7	1	3	7.2	6	4	6	6	6	6	2 (J)
PCE	5	< 0.4	< 0.4	0.6	<1	<1	<1	<1	<1	<1	<1	<1
TCE	5	< 0.3	< 0.3	0.8	<1	<1	<1	<1	<1	<1	<1	<1
1.2-DCE	70	<0.4	< 0.4	1	<1	<1	<1	<1	<1	<1	<1	0.3(J)
vinyl chloride	2	0.9	<0.4	1	<1	<1	<1	<1	<1	<1	<1	<2
acetone	700		15	<5	<1	7	<5	<5	<5	5	6	3 (J)
tetrahydrofuran	154	74	360	94	83	82	<5	74	110	140	160	19
2-butanone	200		<5	<5	<1	<5	<5	<5	<5	<5	<5	<5
	350		<5	<5	<1	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone												
methylene chloride	5	<1	<1	<1	<1	<1	<2	<5	<5	<5	<5	<5
1,1,1,-TCA		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		< 0.3	< 0.3	< 0.3	<1	<1	<1	0.5(J)	<1	<1	<1	0.5(J)
1,1-DCE	7	<1.3	< 0.4	<1.3	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	1	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	0.4(J)
bromomethane		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<2
chloromethane		< 0.5	< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<2
chloroform		< 0.7	< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3		<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<5	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	0.4	<0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<2
chlorobenzene		0.2	< 0.2	0.4	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<0.3	<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<0.2	<0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<0.4	<0.4	<0.4	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	<0.3	<0.3	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone					<1	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10		39.5		40	42	43	42.8	39	43.9	46.2	51.9
arsenic (total)					41	46	40	42	38	41.9	48	55.1
calcium		38,800	22,200	18,800								
iron (dissolved)					44,000	52,400	51,700	55,700	56,400	62,500	68,200	68,400
iron (total)		76,900	44,800	32,900	44,000	56,000	51,600	56,100	57,100	62,700	70,700	70,100
magnesium		18,400	11,300	8,530								
manganese (dissolved)				842	1,600	1,840	1,940	2,040	1,990	2,100	2,380	
manganese (total)		1,900	1,110		1,700	1,980	1,920	2,060	2,010	2,130	2,450	
potassium		12,700	7,610	4,860(B)					2,010	2,130	2,430	
sodium		30,300	25,000	22,000								
pH (SU)						6.17	6.21	5.65	6.28	6.18	6.38	6.28
SC (mS/cm)						1.176	0.933	0.946	1.269	1.304	0.00962	1.301
Turb (NTU)						1.33	1.88	0.64	1.56	0.39	0.00702	55.4
DO (mg/l)						0.38	0.76	3.01	0.32	0.59	0.3	0.25
Eh (mv)						-99.9	6.8	-20.6	-108.7	-4.8	-188	-67
Temp (°C)						7.67	9.79	14.28	9.87	11.57	10.15	10.17
Water Level Elevation						146.88	147.23	147.63	146.78	146.98	146.05	141.94

[&]quot;*" denotes the ground water sample collected for well SB-B3 was incorrectly identified in the field and on the laboratory report as SB-B2.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-200(S)

SCREENED INTERVAL - 17 - 27 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	2	4
ethylbenzene		0.6 (J)	0.7 (J)
toluene	1,000	<1	0.4 (J)
xylenes (total)		<3	<3
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	0.7 (J)	0.7 (J)
vinyl chloride	2	0.8 (J)	1 (J)
acetone	700	<5	3 (J)
tetrahydrofuran	154	<5	2 (J)
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.5 (JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	1
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	0.9 (J)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		0.4 (J)	0.4 (J)
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	24.3	22.7
arsenic (total)		24.3	23.1
calcium			
iron (dissolved)		84,600	82,800
iron (total)		86,800	83,600
magnesium			
manganese (dissolved)		1,430	
manganese (total)		1,460	
potassium			
sodium			
pH (SU)		6.19	6.25
SC (mS/cm)		0.864	0.995
Turb (NTU)		56.8	73.2
DO (mg/l)		0.08	0.28
ORP (mv)		-17	-46
Temp (°C)		9.65	11.66
Water Level Elevation	NA	143.80	144.12

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- $3. \ \ ICL = Interim \ Cleanup \ Level.$
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- $10. \ \, B = Denotes \ an estimated \ value; constituent \ detected \ at \ a \ concentration \ below \ the \ Practical \ Quantitation \ Limit \ (PQL) \ for \ metals.$
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-200(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Nov-08	Apr-09	Jul-09
benzene	5	4	6	6	6
ethylbenzene		3	5	5	5
toluene	1,000	0.8 (J)	1	1	1
xylenes (total)		2 (J)	4	6	5
Aylenes (total)		2 (0)	•	Ü	,
PCE	5	<1	<1	<1	<1
TCE	5	<1	<1	<1	<1
cis-1,2-DCE	70	0.5 (J)	<1	0.7 (J)	0.7 (J)
vinyl chloride	2	1 (J)	1	1 (J)	1 (J)
·					
acetone	700	<5	<5	7	3 (J)
tetrahydrofuran	154	5	26	57	58
2-butanone	200	<5	<5	2 (J)	3 (J)
4-methyl 2-pentanone	350	7	<5	<5	<5
methylene chloride	5	0.7 (J)	<5	2 (JB)	<5
1,1,1-TCA		<1	<1	<1	<1
1,1-DCA		<1	<1	0.9 (J)	0.8 (J)
1,1-DCE	7	<1	<1	<1	<1
1,2-DCA	5	0.5 (J)	<1	0.6 (J)	0.6 (J)
bromomethane		<2	<1	<2	<2
chloromethane		<2	<1	<2	<2
chloroform		<1	<1	<1	<1
dibromochloromethane		<1	<1	<1	<1
bromoform		<1	<1	<1	<1
bromororm		<1	<1	<1	<1
carbon disulfide		<1	<1	<1	<1
styrene		<1	<1	<1	<1
chloroethane	14,000	<2	<1	<2	<2
chlorobenzene		0.4 (J)	<1	0.6 (J)	0.5 (J)
1,2-dichloropropane		<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1
2-hexanone		<5	<5	<5	<5
arsenic (dissolved)	10	21.7	16.5	16.1	21.2
arsenic (total)		19.5	16.6	18.2	20.8
calcium					
iron (dissolved)		83,100	93,900	95,800	
iron (total)		80,400	89,500	98,100	
magnesium					
manganese (dissolved)		1,760	1,980	1,900	
manganese (total)		1,720	1,870	1,930	
potassium					
sodium					
pH (SU)		6.22	6.36	6.20	6.20
SC (mS/cm)		0.841	0.945	1.151	1.139
Turb (NTU)		66.2	9.54	35.5	
DO (mg/l)		0.06	0.2	0.13	0.21
ORP (mv)		-85		-70	-1
Temp (°C)		10.42	9.27	10.75	11.73
Water Level Elevation				145.12	144.96

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA WELL MW-200(D) SCREENED INTERVAL - 60 - 70 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	<1	<1
ethylbenzene		<1	<1
toluene	1,000	<1	<1
xylenes (total)		<3	<3
nylenes (total)			
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	<1	<1
vinyl chloride	2	<2	<2
acetone	700	<5	<5
tetrahydrofuran	154	<5	<5
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.6(JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	<1
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	<1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	>5
arsenic (dissolved)	10	89.6	89.4
arsenic (total)		92.8	86.4
calcium			
iron (dissolved)		158	131
iron (total)		1,170	206
magnesium			
manganese (dissolved)		226	
manganese (total)		246	
potassium			
sodium			
pH (SU)		9.51	7.45
SC (mS/cm)		0.169	0.170
Turb (NTU)		88	13.6
DO (mg/l)		0.14	0.06
ORP (mv)		-88	-109
Temp (°C)		10.73	11.01
Water Level Elevation	NA	144.16	144.66

NOTES:

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- $2. \ \ DCE = Dichloroethene; \ DCA = Dichloroethane; \ MEK = Methyl \ Ethyl \ Ketone \ (2-butanone);$

MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;

- PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in my (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-10I

DOWNGRADIENT WELL SCREENED INTERVAL - 30- 40 FEET BGS

constituent (ppb)	ICL	Jun-01	Nov-01	May-02	Dec-02	Jun-03	Nov-03	May-04	Dec-04	May-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	<1	<1	<1	<1	<1	<10	<1	0.2(J)	<1	0.4(J)	<1	<1	0.7(J)	0.7(J)	1(J)	0.9(J)	1	1(J)
ethylbenzene		<1	<1	<1	0.2(JB)	0.3(J)	<10	<1	1(J)	2	2	3	3	3	4	6	6	7	6
toluene	1,000	<1	<1	<1	<1	3	<10	<1	0.5(J)	<1	0.6(J)	0.8(J)	0.8(J)	1	1 (J)	1	1	2	1
xylene		<1	<1	<1	0.5(J)	6	<10	2	3	3	3	2(J)	<3	2(J)	2(J)	3 (J)	2(J)	4	3(J)
PCE	5	-1	-1	-1	-1	-1	-10	-1	-4	-1	-4		-1	-4			-4	.1	-1
		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1 0.4(T)	<1	<1	<1	<1	<1 0.5(T)	<1 0.4(T)	<1 0.6(T)	<1 0.5(T)
TCE	5	<1	<1	<1	<1	<1	<10	<1	<1	<1	0.4(J)	<1	<1 4	<1 5	<1	0.5(J)	0.4(J)	0.6(J)	0.5(J)
1,2-DCE	70	0.6(J)	<1	<1	<1	<1	<10	1	2	2	3	4			4	7	6	7	8
vinyl chloride	2	<1	<1	<1	<1	<1	<10	<1	0.7(J)	<1	1	<1	2	4	4	5	5	4	6
acetone	700	<5	<5	<5	<5	<5	<10	<1	2(J)	<5	<5	<5	<5	7	<5	4 (J)	3 (J)	3 (J)	4 (J)
tetrahydrofuran	154	<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	2 (J)	2(J)	8	<5
2-butanone	200	<5	<5	7	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350	<5	11	17	<5	19	4 (J)	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	0.7(JB)	<1	<1	5(B)	<10	<1	<1	<2	<2	<5	<5	<5	<5	0.4(J)	<5	1(JB)	1(JB)
1,1,1,-TCA		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		<1	<1	<1	0.3(J)	0.6(J)	<10	1	1	1	2	2	2	3	4	4	4	5	6
1,1-DCE	7	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<1	<1	<1	<1	<1	<10	<1	0.2(J)	<1	<1	<1	0.7(J)	1	0.8(J)	1	1(J)	1	1
bromomethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		<1	0.6(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloroform		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10	12.4(B)	14.9	12.4	14	14.6	11.4	15.4	16.8	15.2	12	13.8	14.6	13.6	13.2	16.4	14.0	14.1	
arsenic (total)		31.8(B)	13.4	13.2	16.6	15.3	15.6	14.5	14.4	17.1	11.4	11.7	15.6	13.8	13.6	17.1	15.3	16.4	
calcium																			
iron (dissolved)		3,840	10,400	8,650	10,800	10,900	10,300	11,600	12,700	14,500	13,900	16,600	17,200	21,800	21,300	24,800	25,700	27,000	
iron (total)		55,000	15,700	9,980	11,900	11,300	9,780	11,900	14,100	14,700	13,400	16,400	16,900	21,100	21,400	25,200	26,100	26,600	
magnesium																			
manganese (dissolved)		540	318	305	290	282	277	305	322	352	339	418	443	542	565	642	649	653	
manganese (total)		1,240	374	286	298	277	260	314	340	355	322	409	438	520	555	643	651	645	
potassium																			
sodium						5,500	5,500												
pH (SU)		6.29	6.77	6.82	6.60	6.77	6.91	6.61	6.61	6.76	6.82	6.63	6.54	6.49	7.06	6.57	6.44	6.95	6.64
SC (mS/cm)		0.071	0.100	0.109	0.108	0.110	0.103	0.154	0.117	0.118	0.145	0.154	0.169	0.187	0.208	0.223	0.219	0.260	0.249
Turb (NTU)			98	8.98	6.15	4.90	4.74	17	1.62	2.90	8.35	1.81	0.93	3.04	2.21	1.40	14.90	6.6	5.21
DO (mg/l)		0.15	0.66	0.23	1.46	0.28	0.28	0.18	0.32	0.67	0.24	0.32	0.37	0.61	0.8	0.39	0.37	0.35	0.31
Eh (mv)		-23.8	-43.5	-60.1	-77.2	-12.4	-114	16	154	-57.8	-103	-103.3	-111.8	-4.3	-217.8	-102.8	-94.6	-129	-96.3
Temp (°C)		9.9	9.3	8.9	7.7	10.2	9	8.9	8.4	8.5	9.48	11.74	10	10.91	10.59	10.84	11.10	11.09	10.08

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-D1(S)

DOWNGRADIENT WELL SCREENED INTERVAL - 5 - 15 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	Jun-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	< 0.2	< 0.2	<l< td=""><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<l< td=""><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""></l<></td></l<>	<1	<1	<1	<1	<1	<1	<1	<l< td=""></l<>
ethylbenzene		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.7(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.9(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	-																							-10												
PCE		<0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TCE	3	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1(B)	<1	<l< td=""><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1		<1	<1	<1	<1	<1	<10	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2
vinyl chloride	2	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<></td></l<></td></l<>	<1		<1	<1	<1	<1	<1	<10	<1	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<2	<1
acetone	700		4	<5	<5	5(R)	16	<5	<5	3(JB)	<5	3(J)	<5	<5	<5	<5	<5		<5	3(JB)	13(B)	<5	<5	<10	<1	2(J)	<5	<5	<5	<5	<5	3(JB)	<5	>5	<5	4(J)
tetrahydrofuran	154	<1	<5	<5	<5	1(R)	<5	<5	<5	<5	<5	<5	<5	3(J)	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	2(J)	<5	<5
2-butanone	200		<5	<5	⊲5	5(R)	<5	<5	<5	0.8(JB)	<5	<5	⊲5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	⊲5	<5	<5	<5	<5	<5	<5	<5	⊲5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.9(JB)	<1	0.9(JB)	<1	5(B)	3(B)	5(B)	1(B)	1(B)	1(B)	0.7(JB)		<5	<1	<1	<1	1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	0.6(JB)	0.8(JB)	0.7(J)
1,1,1-TCA		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCA		<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-DCE	7	<1.3	<1.3	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<0.7	< 0.7	<l< td=""><td><l< td=""><td><1</td><td>0.8(J)</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<l< td=""><td><1</td><td>0.8(J)</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	0.8(J)	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td>0.5(J)</td><td><1</td><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	0.5(J)	<1	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1																						~*						~.								
bromomethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	0.6(J)	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloroform		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-hexanone			<5	<5	<5	<5	<5	<5	<5	<5	<5	⊲5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	٥.	٥.	<5	<5	<5	<5	<5	<5	<5	<5	<5
arsenic (dissolved)	10																<1.98		<2.53	<2.53	<2.08	<2	<1.8	4.8(B)	<1.3	-3	<2.81	<3.45	<3.45	<3.09	< 0.83	1.5(B)	<1.7	< 0.98	<1.20	
arsenic (total)			4.7(B)	< 2.40	< 2.60	< 2.60	<3.80	<1.30	<1	< 2.10	<3	< 2.54	<1.81	<1.85	< 2.07	< 2.19	<1.98		<2.53	<2.53	<2.08	<2	<1.8	<1.3	<1.3	<3	3.2(B)	<3.45	<3.45	<3.09	< 0.83	<0.83	<1.7	< 0.98	<1.20	
calcium		4,340(B)	2,780(B)	1,730	2,170(B)	1,620	1,290(B)	1,260(B)	328(B)	682	440	678(B)	410	534	613(B)	1.260(B)																				
iron (dissolved)		4,540(D)	2,700(1)	1,750	2,170(D)	1,020	1,270(2)	1,200(D)	320(D)			070(2)	410	554	015(15)	1,200(1)	34.6		98.4(B)	233	138	62.7(B)	18.3(B)	116	23.6(B)	87.5(B)	240	352	260	494	1.340	2.200	1.760	1.730	3,910	
iron (total)		5.750	4.260	438	145(UJ)	586	52.7	81.7	42.8(B)	183	100	187	154	118	122	609	73		121	272	170	194	189	387	49.8(B)	122	277	458	346	609	1,340	2.060	1,760	1,770	4.280	
		3,150(B)	1,590(B)	1,420(B)	1,500(B)	1,500	1,020(B)	1.010(B)	42.8(B) 431(B)	570	600	678	580	569	552(B)	1,050(B)	13		121	212	170	194	109	367	49.8(D)	122	211	436	340	009	1,340	2,000	1,700	1,770	4,200	
magnesium					1,300(B)		1,020(B)	, ,						309	332(D)	1,030(B)	92.1		120		247	208		100		107		69.3		96.9	32.1	71.1	41.2	44.5	41.5	
manganese (dissolved)		200	154	150	252	177	123	173	54.0	107	62.2	80.5	59.5	91.6	567	174	83.1		128	322	233	177	66.5	188	102		49.8		41.4			71.1	41.2			
manganese (total)		388	154	158	252	177			54.9	107	63.2			81.6	56.7	174	89.3		127	304			65.5	192	100	110	49.3	67.5	41.1	88.4	32.5	72.4	42.2	45.1	40.2	
potassium		1,490(B) 16,700	577(B)	327(B)	595 13.600	<400 9.790	<336 8.060	<2,340 9,570	140(B)	<421 5.480	<500	<419	<419 3.680	<435 5.610	<450	710(B)							4.400													
sodium pH (SU)			10,100	11,700					3,550(B)		4,640	8,150	-,	0,010	3,960(B)	6,740	2.51		4.62		4.76	4.60		4.72	4.20	4.52	4.50	1.66	4.47	4.62	1.16	4.04	4.07			
				4.51	4.74		4.39	4.78	4.64	4.95	4.67	4.46	4.74	4.40	4.68	4.71	3.51		4.63	4.48	4.76	4.60	4.57	4.72	4.39	4.53	4.59	4.66	4.47	4.63	4.46	4.84	4.87	4.83	4.85	4.69
SC (mS/cm)				0.132	0.128		0.084	0.059	0.043	0.104	0.047	0.083	0.047	0.063	0.013	0.042	0.057		0.053	0.073	0.044	0.065	0.045	0.071	0.068	0.062	0.055	0.060	0.041	0.063	0.036	0.034	0.300	0.040	0.047	0.044
Turb (NTU)				1.50	2		0	0	5	0	0	-10	0	0	0	0	0		5.60	3.20		1.51	1.70	4.40	3.60	0.39	2.14	1.90	0.34	0.27	0.00	1.19	0.63	1.25	41.8	0.47
DO (mg/l)				0.80	3.88		3.86	4.71	2.53	1.55	3.56	0.84	2.07	0.42	0.19	0	1.21		0.32	0.95	2.94	3.69	12.02	1.61	1.21	2.22	0.75	0.01	1.99	0.36	1.16	0.22	0.29	1.16	0.24	0.44
Eh (mv)				332	343		272	164	200	380	274	289	279	208	241	346	116		176	141	197	2.10	206	286	137	298	145	313.4	362.8	312.9	157.9	105.7	133.1	218.9	155	185.3
Temp (°C)				11	6.4		7.4	8.2	8.6	8.7	6.9	7.2	6.6	11	8	9.1	12		11	11	7.3	8.6	8.2	11	7.6	8.2	8.5	11.97	11.91	11.39	8.92	11.76	9.57	10.18	7.86	6.41
Water Level Elevation	149.00	145.02	141.48	144.97	144.98	143.22	144.82	145.01	144.19	145.06	144.97	144.49	144.93	143.46	144.32	144.29	144.69	144.78	144.91	141.06	144.78	144.18	145.46	144.92	144.92	144.98	144.94	145.86	144.96	144.99	144.85	143.64	144.90	144.87	143.90	144.85

SUMMARY OF HISTORICAL GROUND WATER QUALITY DATA WELL SB-D2(D)

DOWNGRADIENT WELL SCREENED INTERVAL - 50 - 60 FEET BGS

constituent (ppb)	ICL	Apr-93	Jul-93	Oct-93	May-94	Oct-94	May-95	Dec-95	Jun-96	Dec-96	May-97	Dec-97	May-98	Nov-98	May-99	Dec-99	Aug-00	Dec-00	Jul-01	Nov-01	May-02	Dec-02	May-03	Nov-03	May-04	Dec-04	Jun-05	Oct-05	Jun-06	Oct-06	Jun-07	Oct-07	Jun-08	Nov-08	Apr-09	May-09
benzene	5	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ethylbenzene		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
toluene	1,000	< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	0.7(JB)	<1	<1	0.6(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
xylene		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	0.6(J)	<1	0.9(J)	<1	<1	<1		<1	<1	<1	<1	0.5(J)	<10	<1	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1		-0.4	-0.4	-1	-1	-1	-1	<1	a	-1	-1	-4	-1	0.9(1)	<1	a	-1		<1	-1	-1	-1	-1	<10	a	-1	a	-1	-1	-1	-1	-1	-1	-1	-1	a
PCE TCE	5	<0.4	< 0.4	<1	<1	<1	<1		<1	<1	<1	<1	<1	0.8(J)		<1	<1			<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	5	< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td>2(B)</td><td><1</td><td><l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<></td></l<>	<1	2(B)	<1	<l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>		<1	<1	<1	<1	<1	<10	<1	<l< td=""><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCE	70	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<></td></l<></td></l<>	<l< td=""><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<></td></l<>		<1	<1	<1	<1	<1	<10	<1	<1	<1	<i< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></i<>	<1	<1	<1	<1	<1	<1	<2	<1
vinyl chloride	2	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><2</td><td><1</td></l<>	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
acetone	700		<5	<5	<5	5(R)	12	<5	<5	1(JB)	<5	10	<5	<5	<5	<5	<5		<5	<5	14(B)	<5	<5	<10	<1	2(J)	<5	<5	<5	<5	3(J)	<5	<5	<5	<5	4(J)
tetrahydrofuran	154	7	<5	<5	<5	1(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	14	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	⊲5
2-butanone	200		<5	<5	<5	5(R)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl 2-pentanone	350		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5	<10	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
methylene chloride	5	<1	<1	<1	<1	<1	0.7(JB)	<1	1(B)	<1	7(B)	6(B)	5(B)	1(B)	1(B)	0.8(JB)	<1		<1	<1	<1	<1	<1	<10	<1	<1	<2	<1	<5	<5	<5	<5	<5	1(JB)	1(JB)	<5
1,1,1-TCA		< 0.5	< 0.5	-1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	~1	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
1,1-DCA		<0.3	< 0.3	<1	<1	<1	<l< td=""><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td>ZI</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td>ZI</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	ZI	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1 <1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td>-1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1 <1	<1 <1	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
1,1-DCE	7	<1.3	<1.3	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-DCA	5	<0.7	<0.7	<1	<1	<1	0.8(J)	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1 1	,			<u></u>	<.1	<.1	0.0(3)	<.1	<.1	<u></u>	<u></u>	<1	<u></u>	<1	<.1	<u></u>	<u></u>		<u></u>	<.1	\.	<.1	<.1	<10	<.1	<1	<1	<u></u>	<.1	<.1	\.	<u></u>	<1			
bromomethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chloromethane		< 0.5	< 0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<2	<1
chloroform		< 0.7	< 0.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibromochloromethane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
bromoform		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
carbon disulfide			<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
styrene		< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
chloroethane	14,000	< 0.4	< 0.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
chlorobenzene		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.5(J)	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		< 0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		< 0.2	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-21	<1	<1	<1		<1	<1	<1	<1	-21	<10	<1	<1	<1	<1	<1	<1	<1	-1	<1	<1	<1	<1
cis-1,3-dichloropropene		< 0.4	< 0.4	<1	<1	<1	<l< td=""><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene		<0.4	< 0.4	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td></td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<></td></l<>	<1	<1		<l< td=""><td><1</td><td><1</td><td><1</td><td><1 <1</td><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td></l<>	<1	<1	<1	<1 <1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<0.3	< 0.3	<1	<1	<1	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td><1</td><td></td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<></td></l<></td></l<>	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<l< td=""><td><10</td><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<></td></l<>	<10	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td><td><1</td><td><1</td><td><l< td=""><td><1</td><td><1</td></l<></td></l<>	<1	<1	<1	<1	<l< td=""><td><1</td><td><1</td></l<>	<1	<1
2-hexanone		<0.5	<5			<5		<5	-5	<5	<5		-5	- 6		- 5	-5			- 6	<5	<5	<5	<10	<1		- 5	-5	- 5		<5	-5	- 5	<5	<5	o 5
arsenic (dissolved)	10																28.2		26.2	26.9	28	27.5	31.5	29.6(E)	29.7	31.6	28.5	29.2	30	22.5	18.5	23.7	16.5	27.4	16.2	
arsenic (total)			64.5	53.1	34.4	34.8	31.7	32.3	34.2	33.5	30	29	30	30.4	31.7	29.5	29.2		35	28.7	26.2	28	30.8	28.6	28.6	31.4	33.5	27.7	28.4	26.5	16.5	23.2	16.5	27.1	17.6	
calcium		46,200	20,700	10,200	9,190	8,180	8,980	8,110	8,080	9,160	9,020	8,420	7.810	8,380	8,550	8,820					20.2		50.0	20.0	20.0				20.4	20.0						
iron (dissolved)		40,200	20,700	10,200	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,100	0,700	0,110	0,000	2,100	>,020	0,420	7,010	0,500	0,550	0,020	4.050		4,320	4.530	4,250	4.480	4.630	3,440	3,890	4,420	4,250	4,290	4,420	4,100	3.200	3.980	2.660	4,450	2,750	
iron (total)		93,800	83,500	4,730	4,970	4,290	4,520	4,050	4,550	4,830	4,630	4,490	4,420	4,330	4,720	4,950	4,140		30,100	4,730	4,300	4,560	4,960	3,710	4.180	4,460	4,910	4,380	4,480	4,530	2,940	3,970	2,540	4,400	3,040	
magnesium		24,000	21,000	3,450	2.710(B)	2,480	2.640(B)	2,440(B)	2,400(B)	2,740	2,680	2.550(B)	2.410	2,520	2.530(B)	2.640(B)	4,140		30,100	4,730	4,500	4,500	4,700	3,710	4,100	4,400	4,910	4,360	4,400	4,330	2,540	3,910	2,340	4,400	3,040	
		24,000	21,000	3,430	2,710(B)	2,460	2,040(B)	2,440(B)	2,400(B)	2,740	2,000	2,330(B)	2,410	2,320	2,330(B)	2,040(D)	417		448	446	393	440	410	340	397	413	417	405	429	385	264	410	244	415	249	
manganese (dissolved)		2.330	1,780	<100	448	418	422	402	430	472	436	453	416	442	442	460	417		448 874	446	393	440	423	362	413	413	417	405 392	429	385	244	410		403	276	
manganese (total)		,				1.500						453 1.650(B)	1.040		1.550(B)								423							3/9		407	225			
potassium sodium		18,500 15,100	18,700 10,800	2,080(B) 8,210	<1,910 6,880	6,270	2,030(B) 6,430	<2,340 7,230	1,400(B) 6,600	1,690 6,440	1,500 6,460	6,120	5,970	1,580 6,260	6,160	1,980(B) 6,140							6,440													
pH (SU)			10,800	7.06	7.15		7				7.01	6.95	7.12		7.02		6 10		6.19	6.99	6.93	7.19		7.15	6.73	6.93	6.96	6.97	6.93	7.12	6.7	6.96	6.91	7.01	6.87	6.70
pH (SU) SC (mS/cm)					0.104		1.04	7.86	6.93	8.27				6.92		6.87	6.19		6.48 0.071				6.91	7.15			6.86					6.86	0.098			0.103
				0.131			1.04	0.059	0.098	0.162	0.099	0.117	0.990	0.110	0.068	0.059	0.099			0.101	0.069	0.102	0.092	0.090	0.108	0.101	0.106	0.104	0.104	0.104	0.096	0.089		0.107	0.112	
Turb (NTU)				18.9	23		4	7	0	2	0	0	2	0	0	0	1		727	5.38		1.23	5.00	0	4.30	0.62	4.83	3.32	2.27	7.20	1.20	2.64	1.22	2.30	39.0	4.43
DO (mg/l)				0.50	1.01		0.24	3.10	0.40	1.12	0.42	0.03	0.46	0.17	0.20	0	0.35		0.22	0.79	0.29	0.48	11.6	0.66	0.38	0.27	1.42	0.35	0.43	0.89	1.28	0.38	1.10	0.18	0.53	1.78
Eh (mv)				114	41		-82	-227	117	-73	-10	-86.4	-62	-37	-86	-33	-11.1		-62	-94.9	-21.9	-141	-41	-98.8	-44.7	16.7	-81.6	-109.6	-94.8	-92.9	-12.9	-98.4	-55.6	-121.3	-88	-13.8
Temp (°C)				9.4	8.4		8.5	7.8	8.8	8.3	7.9	7.4	7.9	8.5	8.7	8.5	9.1		9.5	9.5	8.1	8	9.2	9.2	9.6	7.7	11.2	9.54	12.52	9.89	9.18	9.30	10.16	9.10	9.04	7.80
Water Level Elevation	148.99	145.72	143.67	143.28	145.53	144.59	145.17	145.73	144.70	145.90	145.69	144.98	144.87	144.83	145.40	145.31	145.09	145.24	145.44	143.02	145.24	144.96	145.78	145.51	145.82	145.69	145.94	144.97	146.36	145.59	145.64	144.90	145.45	145.68	144.55	145.77

SUMMARY OF GROUND WATER ANALYTICAL DATA SB-D3(I)

SCREENED INTERVAL - 35 45 FEET BGS

SOUTHERN PLUME PDI DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09	May-09
benzene	5	<1	<1	<1
ethylbenzene		<1	<1	<1
toluene	1,000	<1	<1	<1
xylenes (total)		<3	<3	<3
, (,		-		-
PCE	5	<1	<1	<1
TCE	5	<1	<1	<1
cis-1,2-DCE	70	<1	<1	<1
vinyl chloride	2	<2	<2	<1
acetone	700	<5	<5	<5
tetrahydrofuran	154	<5	<5	<5
2-butanone	200	<5	<5	<5
4-methyl 2-pentanone	350	<5	<5	<5
methylene chloride	5	<5	<5	<5
1,1,1-TCA		<1	<1	<1
1,1-DCA		<1	<1	<1
1,1-DCE	7	<1	<1	<1
1,2-DCA	5	<1	<1	<1
bromomethane		<2	<2	<1
chloromethane		<2	<2	<1
chloroform		<1	<1	<1
dibromochloromethane		<1	<1	<1
bromoform		<1	<1	<1
carbon disulfide		<1	<1	<1
styrene		<1	<1	<1
chloroethane	14,000	<2	<2	<1
chlorobenzene		<1	<1	<1
1,2-dichloropropane		<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1
cis-1,3-dichloropropene		<1	<1	<1
trans-1,3-dichloropropene		<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1
2-hexanone		<5	<5	<5
arsenic (dissolved)	10	63.9	47.8	56
arsenic (total)		68.6	47.1	58
calcium		2.00	 2.550	200
iron (dissolved)		2,690	3,570	298
iron (total)		3,290	3,690	2,990
magnesium		 504		424
manganese (dissolved)		504		424
manganese (total)		498		430
potassium sodium				
pH (SU)		9.09	6.94	7.03
		9.09 0.128		0.122
SC (mS/cm)		92.1	0.118	0.122
Turb (NTU)		92.1 0.15	57.7 0.29	0.61
DO (mg/l) ORP (mv)		-65	-83	0.41 -94.9
Temp (°C)	 N/A	9.88	12.49	8.29
Water Level Elevation	NA	144.78	145.08	

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- $3. \ \ ICL = Interim\ Cleanup\ Level.$
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-204(IA)

SOUTHERN PLUME PDI DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Nov-07	Apr-09
benzene	5	0.6 (J)	0.4(J)
ethylbenzene		<1	<1
toluene	1,000	<1	<1
xylenes (total)		<3	<3
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	<1	<1
vinyl chloride	2	<2	<2
acetone	700	<5	<5
tetrahydrofuran	154	<5	<5
2-butanone	200	<5	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.9(JB)
1,1,1-TCA		<1	<1
1,1-DCA		<1	0.3(J)
1,1-DCE	7	<1	<1
1,2-DCA	5	<1	<1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
1 1 10 1			
carbon disulfide		<1	<1
styrene	14.000	<1	<1
chloroethane	14,000	<2	<2
chlorobenzene		<1	<1
1,2-dichloropropane 1,1,2-trichloroethane		<1 <1	<1 <1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	6.9 B	<1.2
arsenic (total)		7.6 B	<1.2
calcium			
iron (dissolved)		30,600	23,000
iron (total)		31,300	22,600
magnesium			
manganese (dissolved)		605	
manganese (total)		606	
potassium			
sodium			
pH (SU)		6.02	7.46
SC (mS/cm)		0.380	0.315
Turb (NTU)		118	2.4
DO (mg/l)		0.15	0.31
ORP (mv)		-51	-23
Temp (°C)		5.42	11.63
Water Level Elevation	NA	142.75	142.92
			.,-

- Laboratory analytical results are reported in ug/L (micrograms per liter).
 DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm $\,$ (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-206(S)

SCREENED INTERVAL - 3 - 13 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

benzene thylbenzene totolene	constituent (ppb)	ICL	Apr-09
Industry Industry	benzene	5	1 (J)
Xylenes (total)	ethylbenzene		<1
PCE TCE TCE TCE TCE TCS TO TO TO TO TO TO TO TO TO T	toluene	1,000	<1
TCE cis-1,2-DCE vinyl chloride 2	xylenes (total)		<3
TCE cis-1,2-DCE vinyl chloride 2			
cis-1,2-DCE 70 0,7 (J) vinyl chloride 2 <2	PCE	5	<1
vinyl chloride 2 <2	TCE	5	<1
acetone tetrahydrofuran 154	cis-1,2-DCE	70	0.7 (J)
tetrahydrofuran	vinyl chloride	2	<2
tetrahydrofuran			
2-butanone 4-methyl 2-pentanone methylene chloride 5 5 5 5 1,1,1-TCA 1,1-DCA 1,1-DCA 1,1-DCE 7 1,2-DCA 5 0.8 (J) bromomethane chloroform dibromochloromethane bromoform carbon disulfide styrene chloroethane chlorofothane chloroethane chlorobenzene 1,2-dichloropropane 1,1,2-trichloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane cis-1,3-dichloropropene 1,1,2-tertachloroethane	acetone	700	2.0 (J)
4-methyl 2-pentanone methylene chloride 350 <5	tetrahydrofuran	154	<5
methylene chloride 5 <5	2-butanone	200	<5
1,1,1-TCA	4-methyl 2-pentanone	350	<5
1,1-DCA 0.6 (J) 1,1-DCE 7 <1	methylene chloride	5	<5
1,1-DCA 0.6 (J) 1,1-DCE 7 <1			
1,1-DCE 7 <1			
1,2-DCA 5 0.8 (J) bromomethane <2	*		0.6 (J)
bromomethane chloroform dibromochloromethane bromoform carbon disulfide styrene chloroforne dibromochloromethane bromoform carbon disulfide styrene chloroethane chloroethane chlorobenzene 11,2-dichloropropane 1,1,2-trichloroethane cis-1,3-dichloropropene trans-1,3-dichloropropene trans-1,3-dichloropropene stylene clarely-alichloropropene trans-1,3-dichloropropene clarely-alichloropropene stylene s		-	
chloromethane <2	1,2-DCA	5	0.8 (J)
chloromethane <2			
chloroform <1			
dibromochloromethane <1			
bromoform < -1 carbon disulfide < -1 styrene < -1 chloroethane < -1 th.2-dichloropropane < -1 1,1,2-trichloropropene < -1 1,1,2-trichloropropene < -1 1,1,2-tetrachloropropene < -1 1,1,2,2-tetrachloroethane < -1 1,1,2,2-tetrachloroethane < -1 2-hexanone < 5 arsenic (dissolved) 10 3.2 (B) arsenic (total)			
carbon disulfide <1			
styrene <1	bromoform		<1
styrene <1	carbon disulfide		~1
chloroethane 14,000 <2			
chlorobenzene <1	,		
1,2-dichloropropane <1			
1,1,2-trichloroethane <1			
cis-1,3-dichloropropene <1			, and the second
trans-1,3-dichloropropene			
1,1,2,2-tetrachloroethane <1			
2-hexanone <5			<1
arsenic (total) 3.3 (B) calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium pH (SU) 6.02 SC (mS/cm) 0.479			
arsenic (total) 3.3 (B) calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium pH (SU) 6.02 SC (mS/cm) 0.479	arsenic (dissolved)	10	3.2 (B)
calcium iron (dissolved) 22,400 iron (total) 24,300 magnesium manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
iron (total) 24,300 magnesium manganese (dissolved) manganese (total) pH (SU) 6.02 SC (mS/cm) 0.479			
iron (total) 24,300 magnesium manganese (dissolved) manganese (total) pH (SU) 6.02 SC (mS/cm) 0.479	iron (dissolved)		22,400
magnesium manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			· ·
manganese (dissolved) manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479	` '		-
manganese (total) potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
potassium sodium pH (SU) 6.02 SC (mS/cm) 0.479			
pH (SU) 6.02 SC (mS/cm) 0.479			
SC (mS/cm) 0.479	sodium		
	pH (SU)		6.02
	SC (mS/cm)		0.479
Turb (NTU) 123	Turb (NTU)		123
DO (mg/l) 0.43	DO (mg/l)		0.43
ORP (mv)54	ORP (mv)		-54
Temp (°C) 9.04			9.04
Water Level Elevation NA 144.02	Water Level Elevation	NA	144.02

- Laboratory analytical results are reported in ug/L (micrograms per liter).
 DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Tetrachloroethene.$
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical
- Quantitation Limit (PQL).

 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-207(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	21	20
ethylbenzene		7	6
toluene	1,000	3	2
xylenes (total)		13	11
Aylenes (total)		13	
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	2	2
vinyl chloride	2	<2	0.4 (J)
vinyi emoriae	2	\ <u></u>	0.4 (3)
acetone	700	17	10
tetrahydrofuran	154	1400	870
2-butanone	200	8	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	2 (JB)	2 (JB)
methylene emoride	3	2 (3B)	2 (3B)
1,1,1-TCA		<1	<1
1,1-DCA		3	3
1,1-DCE	7	<1	<1
1,2-DCA	5	0.8 (J)	0.9 (J)
1,2 Den	3	0.0 (0)	0.5 (0)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
			**
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	5	5
chlorobenzene		1 (J)	0.8 (J)
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	17.8	20.8
arsenic (total)		17.5	21.0
calcium			
iron (dissolved)		87,100	
iron (total)		85,800	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		7.55	6.23
SC (mS/cm)		4.18	3.60
Turb (NTU)		24.0	
DO (mg/l)		0.20	0.18
ORP (mv)		-19	37
Temp (°C)		12.56	10.91
Water Level Elevation	NA	149.34	148.60

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- $2. \ \ DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl \ Ethyl \ Ketone \ (2-butanone);$ MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 - PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- $6. \ \ J = Denotes \ an \ estimated \ value; constituent \ detected \ at \ a \ concentration \ below \ the \ Practical$ Quantitation Limit (PQL).
- $7. \ \ UJ = Indicates \ an \ estimated \ quantitation \ limit.$
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.

 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-208(S)

SCREENED INTERVAL - 2 - 12 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09
benzene	5	0.3(J)
ethylbenzene		<1
toluene	1,000	<1
xylenes (total)		<3
		-
PCE	5	<1
TCE	5	<1
cis-1,2-DCE	70	0.8(J)
vinyl chloride	2	0.3(J)
		,
acetone	700	<5
tetrahydrofuran	154	<5
2-butanone	200	<5
4-methyl 2-pentanone	350	<5
methylene chloride	5	<5
·		
1,1,1-TCA		<1
1,1-DCA		0.3(J)
1,1-DCE	7	<1
1,2-DCA	5	0.6(J)
bromomethane		<2
chloromethane		<2
chloroform		<1
dibromochloromethane		<1
bromoform		<1
carbon disulfide		<1
styrene		<1
chloroethane	14,000	<2
chlorobenzene		<1
1,2-dichloropropane		<1
1,1,2-trichloroethane		<1
cis-1,3-dichloropropene		<1
trans-1,3-dichloropropene		<1
1,1,2,2-tetrachloroethane		<1
2-hexanone		<5
arsenic (dissolved)	10	2.5 (B)
arsenic (total)		3.0 (B)
calcium		
iron (dissolved)		33,200
iron (total)		34,700
magnesium		
manganese (dissolved)		
manganese (total)		
potassium		
sodium		
pH (SU)		5.84
SC (mS/cm)		0.448
Turb (NTU)		61.7
DO (mg/l)		0.15
ORP (mv)		-50
Temp (°C)		9.78
Water Level Elevation	NA	144.74

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone);
 MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane;
 PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-208(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	16	4
ethylbenzene		7	2
toluene	1,000	2	0.5 (J)
xylenes (total)		6	<3
Aylenes (total)		· ·)
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	2	0.4 (J)
vinyl chloride	2	<2	0.5 (J)
· inji emoride	_	\ <u>-</u>	0.0 (0)
acetone	700	14	3 (J)
tetrahydrofuran	154	960	40
2-butanone	200	<5	2 (J)
4-methyl 2-pentanone	350	6	<5
methylene chloride	5	0.9(JB)	0.6(JB)
		*** (\$-)	333(82)
1,1,1-TCA		<1	<1
1,1-DCA		2	0.5 (J)
1,1-DCE	7	<1	<1
1,2-DCA	5	2	0.6 (J)
			(-)
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	3	<2
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	18.7	11.2
arsenic (total)		18.3	12.9
calcium			
iron (dissolved)		170,000	
iron (total)		160,000	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		5.59	6.31
SC (mS/cm)		3.45	1.16
Turb (NTU)		88.1	
DO (mg/l)		0.25	0.22
ORP (mv)		-32	-95
Temp (°C)		9.87	10.91
Water Level Elevation	NA	146.66	145.89

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; PCE = Tetrachloroethene; TCE = Tetrachloroethene.
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- $8. \ \ E = Result \ exceeded \ calibration \ range \ \ estimated \ value.$
- 9. D = Listed value obtained from second (diluted) analytical run.
- B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.
- 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

SUMMARY OF GROUND WATER ANALYTICAL DATA MW-209(I)

SCREENED INTERVAL - 35 - 45 FEET BGS

SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

constituent (ppb)	ICL	Apr-09	Jul-09
benzene	5	14	8
ethylbenzene		7	5
toluene	1,000	2	2
xylenes (total)		12	5
PCE	5	<1	<1
TCE	5	<1	<1
cis-1,2-DCE	70	0.7(J)	0.7 (J)
vinyl chloride	2	<2	0.7 (J)
	=00	4.0	4.5
acetone	700	10	4 (J)
tetrahydrofuran	154	340	70
2-butanone	200	3(J)	<5
4-methyl 2-pentanone	350	<5	<5
methylene chloride	5	<5	0.8 (JB)
1,1,1-TCA		<1	<1
1,1-1CA 1,1-DCA		3	1
1,1-DCE	7	<1	<1
1,1-DCE 1,2-DCA	5	1(J)	1
1,2-DCA	3	1(3)	1
bromomethane		<2	<2
chloromethane		<2	<2
chloroform		<1	<1
dibromochloromethane		<1	<1
bromoform		<1	<1
carbon disulfide		<1	<1
styrene		<1	<1
chloroethane	14,000	2	0.7 (J)
chlorobenzene		<1	<1
1,2-dichloropropane		<1	<1
1,1,2-trichloroethane		<1	<1
cis-1,3-dichloropropene		<1	<1
trans-1,3-dichloropropene		<1	<1
1,1,2,2-tetrachloroethane		<1	<1
2-hexanone		<5	<5
arsenic (dissolved)	10	19.6	20.6
arsenic (total)		18.8	20.4
calcium			
iron (dissolved)		135,000	
iron (total)		133,000	
magnesium			
manganese (dissolved)			
manganese (total)			
potassium			
sodium			
pH (SU)		6.13	6.20
SC (mS/cm)		2.27	1.57
Turb (NTU)		146	
DO (mg/l)		0.26	0.38
ORP (mv)		-73	-65
Temp (°C)		10.49	10.87
Water Level Elevation	NA	146.7	146.15

- 1. Laboratory analytical results are reported in ug/L (micrograms per liter).
- 2. DCE = Dichloroethene; DCA = Dichloroethane; MEK = Methyl Ethyl Ketone (2-butanone); MIBK = Methyl Isobutyl Ketone (4-methyl 2-pentanone); TCA = Trichloroethane; $\label{eq:pce} PCE = Tetrachloroethene; \ TCE = Tetrachloroethene.$
- 3. ICL = Interim Cleanup Level.
- 4. NA = Not Applicable.
- 5. pH measured in SU (standard units); SC (specific conductivity) measured in mS/cm (millisiemens per centimeter); DO (dissolved oxygen) measured in mg/L (milligrams per liter); ORP = Oxidation Reduction Potential measured in mv (millivolts).
- 6. J = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL).
- 7. UJ = Indicates an estimated quantitation limit.
- 8. E = Result exceeded calibration range estimated value.
- 9. D = Listed value obtained from second (diluted) analytical run.
- 10. B = Denotes an estimated value; constituent detected at a concentration below the Practical Quantitation Limit (PQL) for metals.
- 11. --- = Constituent was not analyzed or ICL has not been established for constituent.

 12. "<" = Not detected above reported PQL.
- 13. BGS = Below Ground Surface.

MODIFIED TABLE 5 FROM OMM PLAN MATRIX OF MONITORING ACTIVITIES SOUTHERN PLUME MANAGEMENT OF MIGRATION DOVER MUNICIPAL LANDFILL SUPERFUND SITE DOVER, NEW HAMPSHIRE

		HYDRAULIC	MONITORING	GRO	UND WATER Q	UALITY MONITO	RING		
WELL ID	STRATIGRAPHIC UNIT	ANNUAL BASELINE	CONTINUOUS HYDRAULIC INFLUENCE	ANNUAL BASELINE SAMPLING	QUARTERLY REMEDY PERFORMANCE MONITORING				
		GAUGING	MONITORING	(APRIL)	JULY	OCTOBER	DECEMBER		
'	•		Existing Monitor	ring Wells			•		
MW-206(I)	UUI	X	X						
PT-1	LUI	X	X						
PT-2	LUI	X							
PT-3	LUI	X							
SB-B1(S)	US	X		X					
SB-B2(I)	UUI	X	X	X	X	X	X		
SB-B3(D)	LUI	X	**	X					
B-10WT	US US	X X	X	X					
MW-200(S) MW-200(I)	UUI	X	X	X	X	X	X		
MW-200(1) MW-200(D)	LUI	X	Α	X	Λ	A	Λ		
SB-10I	UUI	X		X		+			
SB-10D	LUI	X		A .		1			
SB-D1	US	X	 	X		+			
SB-D2	UUI	X		X		1			
SB-D3I	UUI	X	X	X					
SB-4D	UUI	X							
SC-10US	US	X							
SC-10UUI	UUI	X							
SC-10LUI	LUI	X							
SC-11US	US	X							
SC-11UUI	UUI	X							
SC-18US	US	X							
SC-18UUI	UUI	X							
B-4W	US	X							
SB-8U	UUI	X							
SB-8D	LUI	X							
SB-A1	US	X							
SB-A2	US US	X X							
MW-201(S) MW-201(I)	UUI	X					-		
MW-201(I)	LUI	X							
MW-201(D)	US	X				+			
MW-202(S)	US	X		1		1			
MW-204(S)	US	X	 	1		1			
MW-204(IA)	UUI	X	X	X					
MW-204(IB)	UUI	X							
MW-204(D)	LUI	X		1					
MW-205(I)	UUI	X							
SC-8US	US	X			<u> </u>				
SC-8UUI	UUI	X							
SC-8LUI	LUI	X							
SB-C1	US	X							
SB-C2	UUI	X	ļ			<u> </u>			
B-8WT	US	X				<u> </u>			
MW-102S	US	X	1			-			
MW-102U	UUI	X	N Df-						
MW 206(6)	TIG.	v	New Performance Mo			1			
MW-206(S)	US UUI	X	X	X	X 7	X 7	X7		
MW-207(I) MW-208(S)	UUI US	X X	X	X X	X	X	X		
MW-208(S) MW-208(I)	UUI	X	X	X	X	X	X		
MW-208(I) MW-209(I)	UUI	X	X	X	X	X	X		